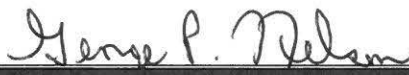


FORM 1 GENERAL		U.S. ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION Consolidated Permits Program (Read the "General Instructions" before starting.)		I. EPA I.D. NUMBER		T/A		C	
				F		DC		0000094	
				1		2		13 14 15	
LABEL ITEMS				GENERAL INSTRUCTIONS If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.					
I. EPA I.D. NUMBER				PLEASE PLACE LABEL IN THIS SPACE					
III. FACILITY NAME									
V. FACILITY MAILING ADDRESS									
VI. FACILITY LOCATION									
II. POLLUTANT CHARACTERISTICS									
INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms .									
SPECIFIC QUESTIONS				Mark "X"			Mark "X"		
				YES	NO	FORM ATTACHED			
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S. ? (FORM 2A)					X		B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S. ? (FORM 2B)		
				16	17	18			
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)				X		X	D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S. ? (FORM 2D)		
				22	23	24			
E. Does or will this facility treat, store, or dispose of hazardous wastes ? (FORM 3)					X		F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		
				28	29	30			
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)					X		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		
				34	35	36			
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)					X		J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area ? (FORM 5)		
				40	41	42			
III. NAME OF FACILITY									
1 SKIP Benning Service Center									
15 16 - 29 30				69					
IV. FACILITY CONTACT									
A. NAME & TITLE (last, first, & title)				B. PHONE (area code & no.)					
2 Mahvi, Fariba, Lead Environmental Engineer				(202) 331-6641					
15 16				45 46 48 49 51 52- 55					
V. FACILITY MAILING ADDRESS									
A. STREET OR P.O. BOX									
3 701 Ninth Street, NW Room 6220									
15 16				45					
B. CITY OR TOWN				C. STATE		D. ZIP CODE			
4 Washington				DC		20068			
15 16				40 41 42		47 51			
VI. FACILITY LOCATION									
A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER									
5 3400 Benning Road, NE									
15 16				45					
B. COUNTY NAME									
46				70					
C. CITY OR TOWN				D. STATE		E. ZIP CODE		F. COUNTY CODE (if known)	
6 Washington				DC		20019			
15 16				40 41 42		47 51		52 -54	

CONTINUED FROM THE FRONT

VII. SIC CODES (4-digit, in order of priority)									
A. FIRST					B. SECOND				
C				(specify)	C				(specify)
7	4	9	1	1	7				
Electric Services									
C. THIRD					D. FOURTH				
C				(specify)	C				(specify)
7					7				
VIII. OPERATOR INFORMATION									
A. NAME									B. Is the name listed in Item VIII-A also the owner?
C	Potomac Electric Power Company								
8									
									<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box: if "Other," specify.)									D. PHONE (area code & no.)
F = FEDERAL			M = PUBLIC (other than federal or state)			P			(specify)
S = STATE			O = OTHER (specify)						
P = PRIVATE									
									A (202) 872-2000
E. STREET OR P.O. BOX									
701 Ninth Street NW									
F. CITY OR TOWN									G. STATE
B Washington									DC
									H. ZIP CODE
									20068
									IX. INDIAN LAND
									Is the facility located on Indian lands?
									<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
X. EXISTING ENVIRONMENTAL PERMITS									
A. NPDES (Discharges to Surface Water)					D. PSD (Air Emissions from Proposed Sources)				
C	T	I			C	T	I		
9	N		DC00000094		9	P		NA	
B. UIC (Underground Injection of Fluids)					E. OTHER (specify)				
C	T	I			C	T	I		
9	U		NA		9			(see Attachment 1)	
C. RCRA (Hazardous Wastes)					E. OTHER (specify)				
C	T	I			C	T	I		
9	R		(see Attachment 1)		9				
XI. MAP									
Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers, and other surface water bodies in the map area. See instructions for precise requirements.									
XII. NATURE OF BUSINESS (provide a brief description)									
<p>The Benning Service Center Facility occupies 77 acres in the northeast of the District of Columbia. The Facility is comprised of a retired electric generating station and a major service center. The generating station was shut down in June 2012 and is currently undergoing demolition. The demolition is tentatively scheduled to be completed by September 2014. The service center supports Pepco's operation of its electric transmission and Distribution system and houses three electric substations (a 69 kV switchyard, a 230 kV switchyard and a newly constructed 115 kV switchyard), Fleet Services Maintenance, Transformer Maintenance Shop, and PCB and hazardous waste accumulation temporary storage areas.</p> <p>Note - This is not a Treatment, Storage and Disposal Facility (TSDF).</p> <p>See Attachment 2 - Site Location Map</p>									
XIII. CERTIFICATION (see instructions)									
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.									
A. NAME & OFFICIAL TITLE (type or print)					B. SIGNATURE			C. DATE SIGNED	
George P Nelson, VP, Operations and Engineering								12/17/2013	
COMMENTS FOR OFFICIAL USE ONLY									
C									
C									



DC0000094

U.S. Environmental Protection Agency
Washington, DC 20460

FORM
2F
NPDES

Application for Permit to Discharge Storm Water Discharges Associated with Industrial Activity

Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information, or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

[illegible]

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

[illegible]

B: You may attach additional sheets describing any additional water pollution (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfalls(s) covered in the application if a topographic map is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage of disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied, each of its hazardous waste treatment, storage or disposal units (including each area not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which received storm water discharges from the facility. **(See Attachment 7- Drainage Area Map)**

Continued from the Front

IV. Narrative Description of Pollutant Sources

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)	Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)
	(See Attachment 8)				

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas, and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

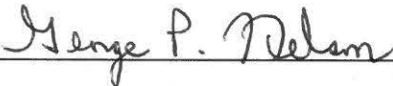
(See Attachment 9)

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table 2F-1
	(See Attachment 10)	

V. Nonstormwater Discharges

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharged from these outfall(s) are identified in either an accompanying Form 2C or Form 2E application for the outfall.

Name and Official Title (type or print)	Signature	Date Signed
George P Nelson, VP, Operations and Engineering		12/17/2013

B. Provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

Stormwater outfalls are identified in Attachments 3 and 6. The only outfall that receives non-storm water discharges is Outfall 013. All storm and non-storm water discharges to this outfall were identified in April 2005 for the renewal of the Benning NPDES Permit (see Attachment 5 for operations contributing flow to Outfall 013). Revised flow data for this outfall will be submitted to EPA once the power plant demolition is completed.

VI. Significant Leaks or Spills

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

(See Attachment 11)

DC0000094

VII. Discharge Information

A, B, C, & D: See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided.

Table VII-A, VII-B, VII-C are included on separate sheets numbers VII-1 and VII-2. **(Tables VII.A, VII.B, VII.C, & VII.D will be provided upon completion of testing. See cover letter for further explanation).**

E. Potential discharges not covered by analysis -- is any toxic pollutant listed in table 2F-2, 2F-3, or 2F-4, a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ Yes (list all such pollutants below)☒ No (go to Section IX)**VIII. Biological Toxicity Testing Data**

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☒ Yes (list all such pollutants below)☐ No (go to Section IX)

Acute Whole Effluent Toxicity (WET) Test - Effluent samples from Outfall 101 (manhole K) and Outfall 013 and an upstream Anacostia River water sample were collected for WET testing in September 2013. The species tested were water flea (*Daphnia pulex*) and fathead minnow (*Pimephales promelas*). The 48 hour screening tests were performed in accordance with the methods described in EPA document 821-R-02-012. The analytical results did not indicate that the samples were acutely toxic to the two test species. A report of the WET testing was submitted to EPA with the DMRs for September 2013.

IX. Contract Analysis Information

Were any of the analyses reported in Item VII performed by a contract laboratory or consulting firm?

☐ Yes (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)☒ No (go to Section X)

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed
(See cover letter for further details)			

X. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

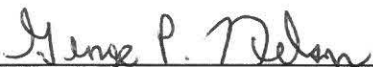
A. Name & Official Title (Type Or Print)

George P Nelson, VP, Operations and Engineering

B. Area Code and Phone No.

(202) 872-2301

C. Signature



D. Date Signed

12/17/2013

Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Part B — List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Continue on Reverse

Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

[illegible]

Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (gallons/minute or specify units)	6. Total flow from rain event (gallons or specify units)

7. Provide a description of the method of flow measurement or estimate.

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Please print or type in the unshaded areas only.

[illegible]

CONTINUED FROM THE FRONT

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?
☒ YES (complete the following table) ☐ NO (go to Section III)

1. OUTFALL NUMBER (list)	2. OPERATION(S) CONTRIBUTING FLOW (list)	3. FREQUENCY		4. FLOW				
		a. DAYS PER WEEK (specify average)	b. MONTHS PER YEAR (specify average)	a. FLOW RATE (in mgd)		B. TOTAL VOLUME (specify with units)		C. DURATION (in days)
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	
013	OWS just ahead of MP 003. See Attachment 5A for further details.	1 - 2 per month	12	0.005 mgd	0.006 mgd	5000 gallon	6000 gallon	2 hours

III. PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility? ☒ YES (complete Item III-B) ☐ NO (go to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measure of operation)?
☐ YES (complete Item III-C) ☒ NO (go to Section IV)

C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. AVERAGE DAILY PRODUCTION			2. AFFECTED OUTFALLS (list outfall numbers)
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. (specify)	

IV. IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operations of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.
☐ YES (complete the following table) ☒ NO (go to Item IV-B)

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
	a. NO.	b. SOURCE OF DISCHARGE		a. REQUIRED	b. PROJECTED

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.

☐ MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED

EPA I.D. NUMBER (copy from Item 1 of Form 1)

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CONTINUED FROM PAGE 2

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.

NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE
NA			

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item V-C a substance or a component of a substance, which you currently use, or manufacture as an intermediate or final product or byproduct?

☐ YES (list all such pollutants below)☒ NO (go to Item VI-B)

CONTINUED FROM THE FRONT

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☒ YES (identify the test(s) and describe their purposes below)

☐ NO (go to Section VIII)

Acute Whole Effluent Toxicity (WET) Test - Effluent samples from Outfall 101 (manhole K) and Outfall 013 and an upstream Anacostia River water sample were collected for WET testing in September 2013. The species tested were water flea (*Daphnia pulex*) and fathead minnow (*Pimephales promelas*). The 48 hour screening tests were performed in accordance with the methods described in EPA document 821-R-02-012. The analytical results did not indicate that the samples were acutely toxic to the two test species. A report of the WET testing was submitted to EPA with the DMRs for September 2013.

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

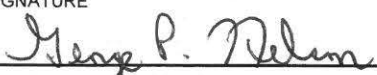
☐ YES (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

☒ NO (go to Section IX)

A. NAME	B. ADDRESS	C. TELEPHONE (area code & no.)	D. POLLUTANTS ANALYZED (list)
(See cover letter for further details).			

IX. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. NAME & OFFICIAL TITLE (type or print) George P Nelson, VP, Operations and Engineering	B. PHONE NO. (area code & no.) (202) 872-2301
C. SIGNATURE 	D. DATE SIGNED 12/12/2013

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. SEE INSTRUCTIONS.

EPA I.D. NUMBER (copy from Item 1 of Form 1)
DC0000094

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)	OUTFALL NO.
--	-------------

PART A –You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Tables V-A, V-B, and V-C will be provided upon completion of testing. See cover letter for further explanation.	2.						3. UNITS (specify if blank)		4. INTAKE (optional)			
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM		b. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)												
b. Chemical Oxygen Demand (COD)												
c. Total Organic Carbon (TOC)												
d. Total Suspended Solids (TSS)												
e. Ammonia (as N)												
f. Flow	VALUE		VALUE		VALUE					VALUE		
g. Temperature (winter)	VALUE		VALUE		VALUE			°C		VALUE		
h. Temperature (summer)	VALUE		VALUE		VALUE			°C		VALUE		
i. pH	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM				STANDARD UNITS				

PART B – Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)														
b. Chlorine, Total Residual														
c. Color														
d. Fecal Coliform														
e. Fluoride (16984-48-8)														
f. Nitrate-Nitrite														

ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
g. Nitrogen, Total Organic (as N)														
h. Oil and Grease														
i. Phosphorus (as P), Total (7723-14-0)														
j. Radioactivity														
(1) Alpha, Total														
(2) Beta, Total														
(3) Radium, Total														
(4) Radium 226, Total														
k. Sulfate (as SO ₄) (14808- 79-8)														
l. Sulfide (as S)														
m. Sulfite (as SO ₃) (14265- 45-3)														
n. Surfactants														
o. Aluminum, Total (7429-90-5)														
p. Barium, Total (7440-39-3)														
q. Boron, Total (7440-42-8)														
r. Cobalt, Total (7440-48-4)														
s. Iron, Total (7439-89-6)														
t. Magnesium, Total (7439-95-4)														
u. Molybdenum, Total (7439-98-7)														
v. Manganese, Total (7439-96-5)														
w. Tin, Total (7440-31-5)														
x. Titanium, Total (7440-32-6)														

EPA I.D. NUMBER (copy from Item 1 of Form 1)

OUTFALL NUMBER

DC0000094

CONTINUED FROM PAGE 3 OF FORM 2-C

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (*secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions*), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (*all 7 pages*) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES		
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS			
																(1) CONCENTRATION	(2) MASS
METALS, CYANIDE, AND TOTAL PHENOLS																	
1M. Antimony, Total (7440-36-0)																	
2M. Arsenic, Total (7440-38-2)																	
3M. Beryllium, Total (7440-41-7)																	
4M. Cadmium, Total (7440-43-9)																	
5M. Chromium, Total (7440-47-3)																	
6M. Copper, Total (7440-50-8)																	
7M. Lead, Total (7439-92-1)																	
8M. Mercury, Total (7439-97-6)																	
9M. Nickel, Total (7440-02-0)																	
10M. Selenium, Total (7782-49-2)																	
11M. Silver, Total (7440-22-4)																	
12M. Thallium, Total (7440-28-0)																	
13M. Zinc, Total (7440-66-6)																	
14M. Cyanide, Total (57-12-5)																	
15M. Phenols, Total																	
DIOXIN																	
2,3,7,8-Tetra- chlorodibenzo-P- Dioxin (1764-01-6)				DESCRIBE RESULTS													

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
																(1) CONCENTRATION
GC/MS FRACTION – VOLATILE COMPOUNDS																
1V. Acrolein (107-02-8)																
2V. Acrylonitrile (107-13-1)																
3V. Benzene (71-43-2)																
4V. Bis (Chloro- methyl) Ether (542-88-1)																
5V. Bromoform (75-25-2)																
6V. Carbon Tetrachloride (56-23-5)																
7V. Chlorobenzene (108-90-7)																
8V. Chlorodi- bromomethane (124-48-1)																
9V. Chloroethane (75-00-3)																
10V. 2-Chloro- ethylvinyl Ether (110-75-8)																
11V. Chloroform (67-66-3)																
12V. Dichloro- bromomethane (75-27-4)																
13V. Dichloro- difluoromethane (75-71-8)																
14V. 1,1-Dichloro- ethane (75-34-3)																
15V. 1,2-Dichloro- ethane (107-06-2)																
16V. 1,1-Dichloro- ethylene (75-35-4)																
17V. 1,2-Dichloro- propane (78-87-5)																
18V. 1,3-Dichloro- propylene (542-75-6)																
19V. Ethylbenzene (100-41-4)																
20V. Methyl Bromide (74-83-9)																
21V. Methyl Chloride (74-87-3)																

CONTINUED FROM PAGE V-4

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-09-2)															
23V. 1,1,2,2-Tetrachloroethane (79-34-5)															
24V. Tetrachloroethylene (127-18-4)															
25V. Toluene (108-88-3)															
26V. 1,2-Trans-Dichloroethylene (156-60-5)															
27V. 1,1,1-Trichloroethane (71-55-6)															
28V. 1,1,2-Trichloroethane (79-00-5)															
29V. Trichloroethylene (79-01-6)															
30V. Trichlorofluoromethane (75-69-4)															
31V. Vinyl Chloride (75-01-4)															
GC/MS FRACTION – ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)															
2A. 2,4-Dichlorophenol (120-83-2)															
3A. 2,4-Dimethylphenol (105-67-9)															
4A. 4,6-Dinitro-O-Cresol (534-52-1)															
5A. 2,4-Dinitrophenol (51-28-5)															
6A. 2-Nitrophenol (88-75-5)															
7A. 4-Nitrophenol (100-02-7)															
8A. P-Chloro-M-Cresol (59-50-7)															
9A. Pentachlorophenol (87-86-5)															
10A. Phenol (108-95-2)															
11A. 2,4,6-Trichlorophenol (88-05-2)															

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)															
2B. Acenaphthylene (208-96-8)															
3B. Anthracene (120-12-7)															
4B. Benzidine (92-87-5)															
5B. Benzo (a) Anthracene (56-55-3)															
6B. Benzo (a) Pyrene (50-32-8)															
7B. 3,4-Benzo- fluoranthene (205-99-2)															
8B. Benzo (ghi) Perylene (191-24-2)															
9B. Benzo (k) Fluoranthene (207-08-9)															
10B. Bis (2-Chloro- ethoxy) Methane (111-91-1)															
11B. Bis (2-Chloro- ethyl) Ether (111-44-4)															
12B. Bis (2- Chloroisopropyl) Ether (102-80-1)															
13B. Bis (2-Ethyl- hexyl) Phthalate (117-81-7)															
14B. 4-Bromophenyl Phenyl Ether (101-55-3)															
15B. Butyl Benzyl Phthalate (85-68-7)															
16B. 2-Chloro- naphthalene (91-58-7)															
17B. 4-Chloro- phenyl Phenyl Ether (7005-72-3)															
18B. Chrysene (218-01-9)															
19B. Dibenzo (a,h) Anthracene (53-70-3)															
20B. 1,2-Dichloro- benzene (95-50-1)															
21B. 1,3-Di-chloro- benzene (541-73-1)															

CONTINUED FROM PAGE V-6

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (continued)															
22B. 1,4-Dichloro- benzene (106-46-7)															
23B. 3,3-Dichloro- benzidine (91-94-1)															
24B. Diethyl Phthalate (84-66-2)															
25B. Dimethyl Phthalate (131-11-3)															
26B. Di-N-Butyl Phthalate (84-74-2)															
27B. 2,4-Dinitro- toluene (121-14-2)															
28B. 2,6-Dinitro- toluene (606-20-2)															
29B. Di-N-Octyl Phthalate (117-84-0)															
30B. 1,2-Diphenyl- hydrazine (as Azo- benzene) (122-66-7)															
31B. Fluoranthene (206-44-0)															
32B. Fluorene (86-73-7)															
33B. Hexachloro- benzene (118-74-1)															
34B. Hexachloro- butadiene (87-68-3)															
35B. Hexachloro- cyclopentadiene (77-47-4)															
36B Hexachloro- ethane (67-72-1)															
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)															
38B. Isophorone (78-59-1)															
39B. Naphthalene (91-20-3)															
40B. Nitrobenzene (98-95-3)															
41B. N-Nitro- sodimethylamine (62-75-9)															
42B. N-Nitrosodi- N-Propylamine (621-64-7)															

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (continued)															
43B. N-Nitro- sodiphenylamine (86-30-6)															
44B. Phenanthrene (85-01-8)															
45B. Pyrene (129-00-0)															
46B. 1,2,4-Tri- chlorobenzene (120-82-1)															
GC/MS FRACTION – PESTICIDES															
1P. Aldrin (309-00-2)															
2P. α-BHC (319-84-6)															
3P. β-BHC (319-85-7)															
4P. γ-BHC (58-89-9)															
5P. δ-BHC (319-86-8)															
6P. Chlordane (57-74-9)															
7P. 4,4'-DDT (50-29-3)															
8P. 4,4'-DDE (72-55-9)															
9P. 4,4'-DDD (72-54-8)															
10P. Dieldrin (60-57-1)															
11P. α-Endosulfan (115-29-7)															
12P. β-Endosulfan (115-29-7)															
13P. Endosulfan Sulfate (1031-07-8)															
14P. Endrin (72-20-8)															
15P. Endrin Aldehyde (7421-93-4)															
16P. Heptachlor (76-44-8)															

EPA I.D. NUMBER (copy from Item 1 of Form 1)

OUTFALL NUMBER

DC0000094

CONTINUED FROM PAGE V-8

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
GC/MS FRACTION – PESTICIDES (continued)																
17P. Heptachlor Epoxide (1024-57-3)																
18P. PCB-1242 (53469-21-9)																
19P. PCB-1254 (11097-69-1)																
20P. PCB-1221 (11104-28-2)																
21P. PCB-1232 (11141-16-5)																
22P. PCB-1248 (12672-29-6)																
23P. PCB-1260 (11096-82-5)																
24P. PCB-1016 (12674-11-2)																
25P. Toxaphene (8001-35-2)																

EPA ID Number - DC0000094

Attachment 1 - Response to Question X. of Form 1

C. RCRA Permit

Benning Service Center - DC000819516

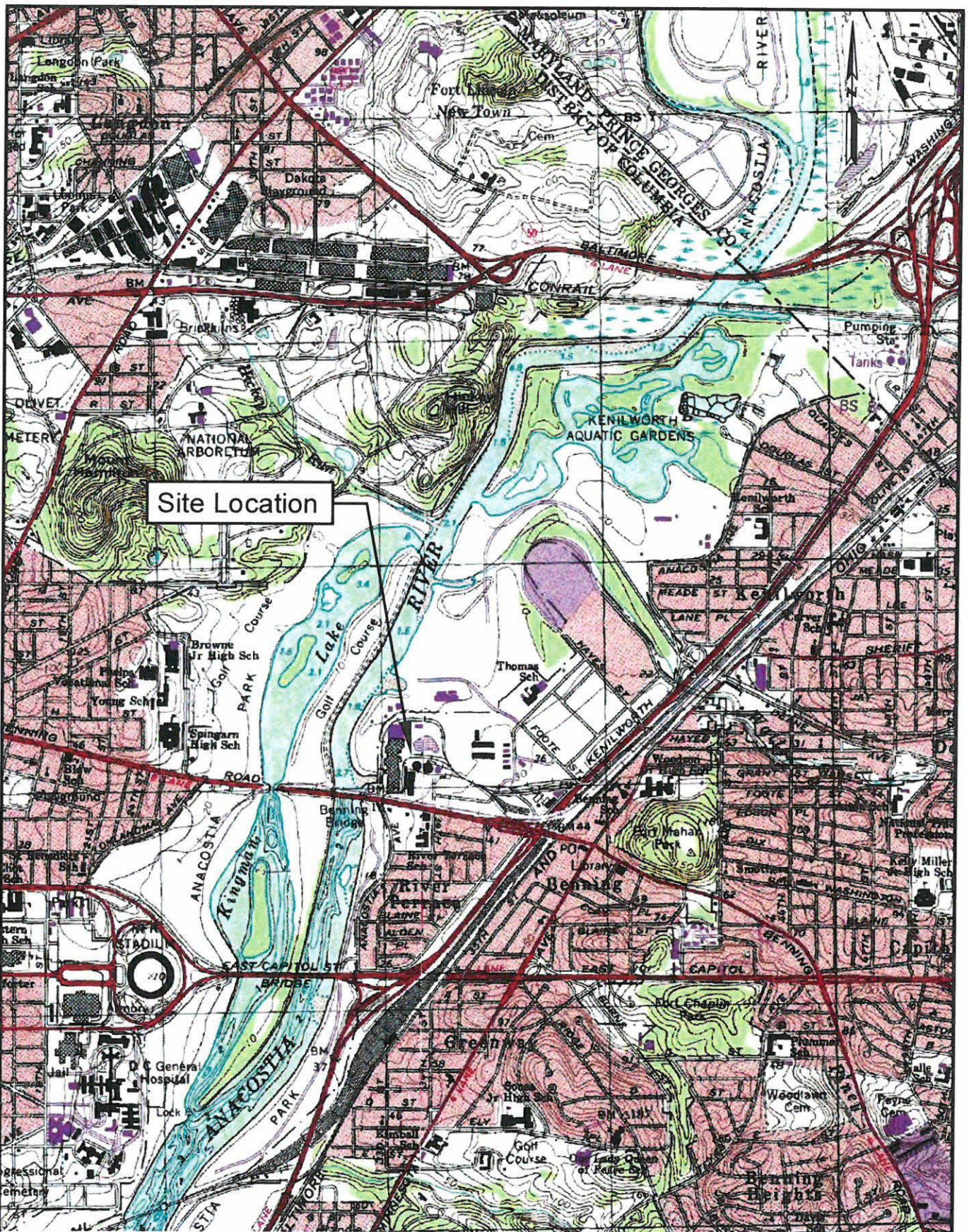
E. Other Environmental Permits

Air Permit# 026-R1

Oil Operations Permit - 2009-OPV-3141A

Temporary Discharge Authorization Permit - 0312-882

Waste Hauler Permit - WH41



AECOM

Source:
USGS 7.5 Minute Topographic Map
Washington East Quadrangle

0 1000 2000 4000
SCALE IN FEET

Benning Road Facility
3400 Benning Rd., NE
Washington, DC 20019

Attachment 2 Site Location Map

DATE: 07/09/2012

DRAWN BY: LAD

CHECKED BY: RD

Attachment 3 - Response to Question 1 of Form 2C

A. OUTFALL NUMBER (list)	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER (name)
	1. DEG	2. MIN	3. SEC	1. DEG	2. MIN	3. SEC	
005	38	53	54	76	57	5	Washington, DC Storm Sewer System
006	38	53	45	76	57	26	Washington, DC Storm Sewer System
013	38	53	60	76	57	30	Anacostia River
014	38	54	1	76	57	15	Washington, DC Storm Sewer System
015	38	53	60	76	57	13	Washington, DC Storm Sewer System
101	38	53	46	76	57	36	Anacostia River
401	38	53	56	76	57	8	Washington, DC Storm Sewer System

EPA ID # DC0000094

Attachment 4 – Response to Question II.A of Form 2C

Attachment 5 - Response to Question II.B of Form 2C

1. Outfall Number	2. Operations Contributing Flow		3. Treatment Units	
	a. Operation ⁽¹⁾	b. Average Flow(mgd) ⁽²⁾	a. Description	b. List Codes
005	Runoff from parking area (area 25)	0.07	Discharge to surface water	4-A
006	Runoff from parking areas and Benning Road entrance road (area 9)	0.28	Discharge to surface water	4-A
014	Runoff from northeast side of property including roadways and storage areas (area 23)	0.28	Discharge to surface water	4-A
015	Runoff from Substation 7 and roadways all collect in water quality structure prior to discharge(area 27)	0.43	Settling in WQS Discharge to surface water	1-U 4-A
013	Stormwater and process water flow (see a thru s below) is discharged to Anacostia River via the 54 inch storm drain pipe:	5.86	Discharge to surface water	4-A
	a. Internal discharge point 420 - runoff from yard drains and roadways (area 11) plus flow from three discharges points 201, 204 and 703: 1. Internal MP 201- effluent from Plant's oil/water separator which consist of stormwater runoff from areas 3 and 6 and yard drains 2. Internal discharge point 204 - stormwater overflow from lift station when influent exceeds 500 gpm 3. Internal discharge point 703 - runoff from area 7 to water quality structure	2.107	Settling in oil/water separator Settling in water quality structure	I-U I-U
	b. Internal discharge point 206 - runoff from gravel area (area 8) (see Note 1)			

	c. Internal discharge point 402- runoff from parking areas, building 57, south sides of buildings 54 and 56 (area 17).	0.435		
	d. Internal discharge point 403 - runoff from roadway (area 22) to water quality structure	0.253	Settling in water quality structure	1-U
	e. Internal discharge point 404 - runoff from parking areas and roadway on the southeast corner of property (areas 18 and 21)	0.297		
	f. Internal discharge point 405 - runoff from parking areas on the north sides of Buildings 54 and 56 (area 24)	0.313		
	g. Internal discharge point 406- effluent from T&D oil water separator (MP 003), runoff from parking areas, Building 59, south side of Building 75 and internal roadways (area 14)	0.737	Carbon filtration prior to discharge to MP 003	2-A
	h. Internal discharge point 407 - runoff from parking areas and roadway east of storage building 42 (area 28)	0.183		
	i. Internal discharge point 408- runoff from storage yard, Buildings 60, 41 and 61, north side of Building 42, southeast side of Building 88, and northeast side of Building 75 and internal roadways (area 15)	0.341		
	j. Internal discharge point 409 - runoff from loading area on the north side of Building 88 (area 16)	0.292		
	k. Internal discharge point 413 - runoff from yard areas, internal roadways and east side of Fire Pump House (area 29)	0.053		
	l. Internal discharge point 414 - runoff from Substation 41 and transformer spill containment pits (area 13)	0.005		
	m. Internal discharge point 415- runoff from yard area (area 30)	0.083		
	n. Internal discharge point 416 - runoff from parking	0.273		

	areas, material stockyard, Building 44 and internal roads (area 12)			
	o. Internal discharge point 417 - runoff from salvage yard and internal roadways (areas 10 and 33)	0.028		
	p. Internal discharge point 418 - runoff from parking area (area 19)	0.112		
	q. Internal discharge point 419 - runoff from internal roads west of building 88 (area 31)	0.066		
	r. Internal discharge point 425 - Runoff from internal road between north side of Building 75 and south side of Building 88 (area 32)	0.108		
	s. Internal discharge 010 - No discharge from the Drying Pit since the drain pipe is capped and locked.	None		
101	Runoff from southwest corner of the property including interior roadways, landscaping and generating station roof drains (area 2).	0.53	Discharge to surface water	4-A
401	Runoff from Substation 7 transformer and reactor spill containment pit; Substation 7 fire protection room, floor drain and city water valve leakage; cable vault floor drains and transformer containment area (area 26)	0.14	Discharge to Surface Water	4-A

Notes:

- (1) Discharge points 202 and 203 (cooling towers blow down) and discharge point 207 (cooling tower unit 15 overflow), and cooling tower unit 16 overflow to discharge point 206 were eliminated when the power plant was shut down in June 2012.
- (2) Data previously submitted to EPA on May 16, 2005 for the renewal of the Benning NPDES Permit. Revised flow data for each outfall will be submitted to EPA once the power plant demolition is completed.

EPA ID # DC0000094

Attachment 5A - Response to Question II.C of Form 2C

Water removed from utility manholes within the District of Columbia is transported to the Benning facility and is discharged into an OWS just ahead of MP 003, as described in Attachment 5 (Outfall 013, item g.) and Attachment 10 (item 4). This OWS operates in a batch mode approximately once or twice per month, 12 months per year. Each discharge lasts for approximately 2 hours with a total flow of approximately 5000 gallons.

Attachment 6 - Response to Question 1of Form 2F

A. OUTFALL NUMBER (list)	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER (name)
	1. DEG	2. MIN	3. SEC	1. DEG	2. MIN	3. SEC	
005	38	53	54	76	57	5	Washington, DC Storm Sewer System
006	38	53	45	76	57	26	Washington, DC Storm Sewer System
013	38	53	60	76	57	30	Anacostia River
014	38	54	1	76	57	15	Washington, DC Storm Sewer System
015	38	53	60	76	57	13	Washington, DC Storm Sewer System
101	38	53	46	76	57	36	Anacostia River
401	38	53	56	76	57	8	Washington, DC Storm Sewer System

EPA ID # DC0000094

Attachment 7 - Response to Question III of Form 2F

Attachment 8 - Response to Question IV. A of Form 2F

Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)
005	0.39 Acres	0.59 Acres
006	2.26 Acres	2.27 Acres
013	39.94 Acres	50.27 Acres
014	1.88 Acres	2.42 Acres
015	1.52 Acres	4.34 Acres
016	1.54 Acres	2.27 Acres
101	3.92 Acres	4.38 Acres
401	1.05 Acres	1.12 Acres

Note - The data presented above were previously submitted to EPA on May 16, 2005 for the renewal of the Benning NPDES Permit. Due to the generating station demolition, the impervious surface areas for outfalls 013 and 101 (Manhole K) will change. Once the demolition is completed, the areas of impervious surfaces and the total surface area drained to these outfalls will be recalculated, the existing data for all other outfalls identified above will be verified, and a revised data will be submitted to supplement this permit renewal application.

Attachment 9 - Response to Question IV-B of Form 2F

Oil Storage Area

- Used Oil - The used oil is stored in a 500 gallon used oil tank located outside Building 75. The tank has built-in secondary containment.
- Mineral Transformer Oil - The transformer oil is stored in four (4) aboveground tanks. The tanks are located under a canopy structure. The concrete diked area can hold 140% of the volume of one tank.

Chemical Storage Area

- There are no chemical storage areas in the facility. Chemicals (Ammonia and Sulfuric Acid) stored on the power plant area were removed and disposed off-site before the demolition work commenced.

PCB and Hazardous Waste Storage Area

- PCB Building - This building is used for temporary storage of PCB materials and hazardous waste prior to disposal off-site. The floor is concrete and has an epoxy coating that is impervious to any oil or chemical spills. There is a containment curbing around the interior perimeter. There are no floor drains within the building that connect to the facility's storm drain system. An internal drain pipe is connected to a 2,000 gallon fiberglass underground tank equipped with manhole access for pumping and off-site disposal.

Oil Filled Electrical Equipment Storage Area

- Outside of Building 56 - New and off-line electrical equipment is temporarily stored outside pending removal to the Transformer Test Shop. Oil absorbent booms are in place around this equipment. Off-line transformers with unknown PCB content are temporarily stored in a concrete berm area which is covered by a canopy.
- Outside storage areas - Stores Department areas in the vicinity of Buildings 44, 88, 40, 60, 41, 61, 42, 66 and the Stores salvage yard are used for storage of new and off-line transformers, capacitors and various electrical equipment. This equipment contains non- PCB oil.

Pesticide/Herbicide Use ⁽¹⁾

Pesticides

<u>Trade Name</u>	<u>Chemical Name</u>	<u>Application</u>	<u>Location</u>
Maxforce	Hydramethylnon	Kill Roaches	All Buildings Interior
Contrac	Bromadiolone	Kill Rats and Mice	Building Nos. 65 and 75

Herbicides

Roundup ⁽²⁾	Glyphosate	Kill Weeds & Poison Ivy	Around Buildings, Parking lots, Substations & Switchyards
Diuron 80	Dimethylurea	Kill Weeds & Poison Ivy	Substations & Switchyards
Riverdale Spyder		Kill Weeds & Poison Ivy	Substations & Switchyards
Riverdale Razor		Kill Weeds & Poison Ivy	Substations & Switchyards
SURF AC 820	Non-ionic Surfactant	Kill Weeds & Poison Ivy	Substations & Switchyards
Weedestroy AM-40	Dimethylamine Salt	Kill Weeds & Poison Ivy	Substations & Switchyards
Supersate	Glyphosate	Kill Weeds & Poison Ivy	Around Buildings & Parking lots

(1) - Pepco uses the services of outside contractors for pesticides and herbicides applications at Benning.

(2) - Substation has only a 55 gallon drum of Roundup inside the Gardner's Shop in Building 54.

Attachment 10 - Response to Question IV-C of Form 2F

STRUCTURAL CONTROLS (for Outfall 013)

1. Secondary Containment - Oil filled electrical equipment is provided with secondary containment (concrete dikes or berms) or surrounded by oil absorbent booms in order to prevent the discharge of any leak, spill, or overfill into the storm drains.

2. Water Quality Structures - Three water quality structures are located on the Facility and identified as WQ on the Benning Drainage Area Map. The locations of these structures are as follows.

<u>Location of Water Quality Structures</u>	<u>Discharge Point</u>
Adjacent to Substation 7 and Foote Street	015
On the parking lot, South of Substation 7	403
Adjacent to Monitoring Point (MP) 201	MP 201

The water quality structures are designed to remove debris and sediment from the process and storm water by gravity separation. The structures are inspected and cleaned of sediment build-up twice a year. (The WQ structure located at MP 201 is currently inaccessible due to the power plant demolition).

3. Underground Sedimentation Filtration Vault - This vault (also identified as WQ on the Benning Drainage Area Map) was installed in the employee parking lot (south of Storage Building 42) in March 2011 as part of the upgrades to the stormwater drainage system at the Gas Insulating Switchyard (GIS), which is located inside Substation 7. There are 18 cartridges inside the vault to filter and remove suspended solids and sediment from storm water originating from the GIS. The filtered water flows to the 54 inch storm drain pipe.

4. Oil/Water Separators - Two oil/water separators (OWS) are located at the Benning Service Center. One OWS is located ahead of MP 003 and is used to remove oil and grease and solids from water which is pumped from Pepco's utility manholes within the District of Columbia and transported to

the facility. The effluent from the OWS passes through carbon filters prior to MP 003 and eventually discharges through outfall 013. The second OWS is located ahead of MP 201 and is currently used to treat yard drainage and sump infiltration (in the power plant basement) which discharge to the lift station prior to being pumped to the oil/water separator. (Note - the sump infiltration will be eliminated once the power plant building is demolished).

NONSTRUCTURAL CONTROLS (for Outfalls 013 and 101)

1. Low Impact Development (LID) Projects - Three LID projects were constructed at the Benning Service Center, identified as 4a, 4b and LID project 3 on the Drainage Area Map. The purpose of these projects is to capture storm water runoff along the heavily trafficked main access road and the employee parking lot. These locations were identified to have the highest potential for capturing polluted runoff from vehicle traffic. The first LID, built in December 2002, is an infiltration swale and drains a parking lot area of approximately 0.3 acre. The second LID, built in October 2004, is a rain garden and drains a yard area of approximately 0.09 acre. The third LID built in 2007, is a linear bioretention system upgradient of the rain garden in the same drainage area. The Benning Stormwater Pollution Prevention Plan provides a maintenance schedule for the LID.

2. TMDL Implementation Plan - As part of the TMDL implementation Plan developed in accordance with the facility's NPDES permit requirements and approved by EPA in July 2010, additional control measures to reduce stormwater contamination have been implemented as follows:

- a. Phase I - Storm Drain Inlet Maintenance:
 - Metal absorbing inlet guards have been installed at all storm drain inlets throughout the facility, except for six inlets where the configuration or design of them did not permit the placement of inlet guards.
 - Heavy duty inlet guards have been placed at areas where there are heavy traffics.
 - Oil absorbing booms are in place around the majority of inlets, except in heavy traffic areas where it would be impractical to install them.
- b. Phase II - Metal Management:
 - Stored metal in areas exposed to the weather has been either removed from the site or covered up for protection from rainfall.

Monthly inspections and maintenance of storm drain inlets and metal management practices are being conducted throughout the site as part of the facility's SWP3 to minimize potential sources of metals in stormwater discharges from the facility. Additional inspections are also conducted after heavy storms to ensure that the control measures applied at the storm inlets remain intact.

Additional measures to protect the storm drain inlets during the generating station demolition have been implemented. This includes covering all the inlets affected by the demolition activities with mesh filters fabric and securing the fabrics with clean rocks. These measures were implemented in addition to the existing metal absorbing guards and sediment removing socks in place.

EPA ID NUMBER - DC0000094

Attachment 11 – Response to Question VI of Form 2F

Location	Date (m/d/y)	Spill	Leak	Type of Material	Quantity	Source, If known	Reason	Amount of Material Recovered	Material No Longer Exposed to Storm Water (T/F)	Preventive Measures Taken
Transformer Storage Yard	6/28/2013	X		Mineral Oil	50 gallons	Damaged transformer	Transformer struck by a forklift	All	T	Employee briefing
Generating Station	6/11/2013	X		No. 4 Fuel Oil	25 gallons	Abandoned Oil Tank	Contractor failed to plug abandoned fuel oil line before storm event.	Estimated 20 gallons	T	Contractor Training
Transformer Storage Yard	3/15/2013	X		Mineral Oil	5 gallons	Transformer	Unit being transported was struck by a vehicle	All	T	Employee briefing
Fuel Island	9/12/2012	X		Gasoline	1 gallon	Fuel Pump	Employee error - Overfilled portable tank	All	T	Employee briefing
Benning Roadway	8/9/2011	X		Diesel Fuel	10 gallons	Contractor truck	Leaking fuel line	All	T	Equipment repaired
Substation 7	4/5/2010	X		Mineral Oil	50 gallons	Transformer	Bushing failure	All	T	Equipment repaired
Substation 14	1/14/2010	X		Mineral Oil	10 gallons	Transformer B-0650	Bushing failure	All	T	Equipment repaired

Via Electronic Mail and Overnight Delivery

Ms. Carissa Moncavage
U.S. Environmental Protection Agency Region 3
1650 Arch Street
Philadelphia, PA 19103-2029

Re: Benning Service Center – Update to NPDES Permit Application for Renewal of Permit
No. DC0000094

Dear Ms. Moncavage:

Potomac Electric Power Company (“Pepco”) is pleased to submit the enclosed updated application for renewal of the Benning Service Center NPDES Permit No. DC0000094, together with supporting attachments, as a supplement to our permit renewal application submitted on December 17, 2013. In addition to the information provided in this cover letter, we are submitting herewith: (a) updated versions of Form 1 and Form 2F, along with various attachments to supplement our responses to the questions on the forms, and (b) a technical memorandum prepared by Pepco’s consultant regarding permit limits under the renewed permit.¹

The Benning Service Center (“the facility”) is located at 3400 Benning Road N.E., Washington, D.C.. Occupying approximately 77 acres, the Benning facility is composed of three electric substations and a variety of administration, operation and maintenance activities, including office facilities, fleet services maintenance and a transformer maintenance shop, that support Pepco’s electric transmission and distribution system throughout the Washington, D.C. area.

The facility’s current NPDES Permit was issued by the U.S. Environmental Protection Agency Region 3 and last renewed effective July 19, 2009. At that time, a steam electric generating station was still in operation at the site (and for that reason, the permit listed the facility name as the “Benning Generating Station.”) In the intervening period, however, the generating station has been shut down, decommissioned, and removed from the site. The power plant ceased operations in June 2012. Two large cooling towers were dismantled and removed from the site in 2013. The remaining power plant buildings and structures were demolished and removed from the site in 2014 and 2015. The concrete basins for the cooling towers were removed in 2017, and two stormwater treatment basins were constructed within the footprints of the basins. Aerial photographs depicting the facility in 2012, when the generating station was still in operation, and in 2018, after removal of the power plant infrastructure, are attached to this letter at Exhibit A. These photographs illustrate the significant changes to site infrastructure and operations resulting from the shutdown, decommissioning and removal of the generating station. In addition to the cooling towers and main power plant building, structures removed from the site

¹ We have not included copies of laboratory reports and other documentation related to the analytical data presented in the application forms. Most of that documentation has previously been submitted to EPA with the facility’s discharge monitoring reports. Please advise if EPA needs any additional documentation and we will promptly provide it.



Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

19F1127

Project Description

Benning Rd. Gen Station

For:

Fariba Mahvi

PEPCO-Benning Rd - G0055

3400 Benning Rd. N.E, Chem-Bldg 56

Washington, DC 20019

Customer Relationship Coordinator

Evelyn Shinas

Wednesday, October 30, 2019

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories. Review and compilation of your report was completed by Microbac Laboratories, Inc. - Baltimore. If you have any questions, comments, or require further assistance regarding this report, please contact your service representative listed above.

I certify that all test results meet all of the requirements of the accrediting authority listed within this report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories. The reported results are related only to the samples analyzed as received.

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CERTIFICATE OF ANALYSIS

19F1127

PEPCO-Benning Rd - G0055

Project Name: Benning Rd. Gen Station

Fariba Mahvi
3400 Benning Rd. N.E, Chem-Bldg 56
Washington, DC 20019

Project / PO Number: 90016472
Received: 06/19/2019
Reported: 10/30/2019

Sample Summary Report

<u>Sample Name</u>	<u>Laboratory ID</u>	<u>Client Matrix</u>	<u>Sample Type</u>	<u>Sample Begin</u>	<u>Sample Taken</u>	<u>Lab Received</u>
Outfall 101 - Manhole K	19F1127-01	Stormwater	Composite		06/17/19 17:55	06/19/19 15:50
Outfall 101 - Manhole K-Wet	19F1127-02	Stormwater	Composite		06/17/19 22:42	06/19/19 15:50
Outfall 013Q	19F1127-03	Stormwater	Grab		06/17/19 18:05	06/19/19 15:50
Outfall 013Q-Wet	19F1127-04	Stormwater	Composite		06/17/19 22:45	06/19/19 15:50



Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

19F1127

Analytical Testing Parameters

Client Sample ID: Outfall 101 - Manhole K
Sample Matrix: Stormwater
Lab Sample ID: 19F1127-01

Collected By: James Dilts
Collection Date: 06/17/2019 17:55

Wet Chemistry	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
EPA 353.2								
Nitrate/Nitrite as N	0.605	0.100	mg/L	1			06/27/19 1033	SRZ
EPA 410.4								
COD, Total	<50	50	mg/L	1		06/20/19 1112	06/20/19 1506	EIP
SM 2540 D-11								
Total Suspended Solids	45	4.0	mg/L	4		06/21/19 1105	06/22/19 1021	EIP
SM 4500-N Org B+NH3 B+NH3 C-11								
Total Kjeldahl Nitrogen	2.52	1.00	mg/L	1		06/26/19 1732	06/27/19 1603	OCT
SM 4500-P E-11								
Phosphorus, Total (as P)	0.16	0.010	mg/L	1		06/24/19 1131	06/24/19 1440	SRZ
SM 5210 B-11								
BOD	11	2.0	mg/L	1		06/19/19 1700	06/24/19 1151	DPG
TKN+NO3 Calculation								
Nitrogen, Total as N	3.13	1.00	mg/L	1		06/27/19 1033	06/27/19 1603	OCT
Metals, Total by EPA 200 Series Methods								
EPA 200.2/EPA 200.7								
Iron	2.3	0.020	mg/L	1		06/20/19 1437	06/24/19 1444	APS
EPA 200.2/EPA 200.8								
Copper	0.0483	0.0010	mg/L	1		06/20/19 1443	06/21/19 1214	GHW
Lead	0.0335	0.0010	mg/L	1		06/20/19 1443	06/21/19 1214	GHW
Nickel	0.0289	0.0010	mg/L	1		06/20/19 1443	06/21/19 1214	GHW
Zinc	0.0936	0.0050	mg/L	1		06/20/19 1443	06/21/19 1214	GHW
Cadmium	0.000316	0.000250	mg/L	1		06/20/19 1443	06/21/19 1214	GHW
Oil and Grease								
EPA 1664A								
Oil & Grease, HEM	<5.66	5.66	mg/L	1		06/27/19 1217	06/27/19 1359	OCT

Analyses Subcontracted to: Microbac Laboratories Inc., - Marietta, OH

Pesticides - GC/ECD	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
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Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

19F1127

Client Sample ID: Outfall 101 - Manhole K

Sample Matrix: Stormwater

Lab Sample ID: 19F1127-01

Collected By: James Dilts

Collection Date: 06/17/2019 17:55

Pesticides - GC/ECD	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
EPA 608.3								
Aroclor-1016 (PCB-1016)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1329	ECL
Aroclor-1221 (PCB-1221)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1329	ECL
Aroclor-1232 (PCB-1232)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1329	ECL
Aroclor-1242 (PCB-1242)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1329	ECL
Aroclor-1248 (PCB-1248)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1329	ECL
Aroclor-1254 (PCB-1254)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1329	ECL
Aroclor-1260 (PCB-1260)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1329	ECL
Surrogate: Decachlorobiphenyl (BZ-209)	7.58	Limit: 20-140	% Rec	1	S4	06/24/19 0940	06/25/19 1329	ECL
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	52.8	Limit: 20-180	% Rec	1		06/24/19 0940	06/25/19 1329	ECL



Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

19F1127

Client Sample ID: Outfall 101 - Manhole K-Wet

Sample Matrix: Stormwater

Lab Sample ID: 19F1127-02

Collected By: James Dilts

Collection Date: 06/17/2019 22:42

Wet Chemistry	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
EPA 353.2								
Nitrate/Nitrite as N	0.604	0.100	mg/L	1			06/27/19 1031	SRZ
EPA 410.4								
COD, Total	<50	50	mg/L	1		06/20/19 1112	06/20/19 1506	EIP
SM 2540 D-11								
Total Suspended Solids	26	4.0	mg/L	4		06/21/19 1105	06/22/19 1021	EIP
SM 4500-N Org B+NH3 B+NH3 C-11								
Total Kjeldahl Nitrogen	2.52	1.00	mg/L	1		06/26/19 1732	06/27/19 1603	OCT
SM 4500-P E-11								
Phosphorus, Total (as P)	0.17	0.010	mg/L	1		06/24/19 1131	06/24/19 1441	SRZ
SM 5210 B-11								
BOD	8.7	2.0	mg/L	1		06/19/19 1707	06/24/19 1157	DPG
TKN+NO3 Calculation								
Nitrogen, Total as N	3.12	1.00	mg/L	1		06/27/19 1031	06/27/19 1603	OCT
Metals, Total by EPA 200 Series Methods	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
EPA 200.2/EPA 200.7								
Iron	1.7	0.020	mg/L	1		06/20/19 1437	06/24/19 1447	APS
EPA 200.2/EPA 200.8								
Copper	0.0358	0.0010	mg/L	1		06/20/19 1443	06/21/19 1216	GHW
Lead	0.0232	0.0010	mg/L	1		06/20/19 1443	06/21/19 1216	GHW
Nickel	0.0266	0.0010	mg/L	1		06/20/19 1443	06/21/19 1216	GHW
Zinc	0.0743	0.0050	mg/L	1		06/20/19 1443	06/21/19 1216	GHW
Cadmium	<0.000250	0.000250	mg/L	1		06/20/19 1443	06/21/19 1216	GHW
Oil and Grease	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
EPA 1664A								
Oil & Grease, HEM	<5.21	5.21	mg/L	1		06/27/19 1217	06/27/19 1359	OCT

Analyses Subcontracted to: Microbac Laboratories Inc., - Marietta, OH

Pesticides - GC/ECD	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
EPA 608.3								

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Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

19F1127

Client Sample ID: Outfall 101 - Manhole K-Wet

Sample Matrix: Stormwater

Lab Sample ID: 19F1127-02

Collected By: James Dilts

Collection Date: 06/17/2019 22:42

Pesticides - GC/ECD	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
Aroclor-1016 (PCB-1016)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1420	ECL
Aroclor-1221 (PCB-1221)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1420	ECL
Aroclor-1232 (PCB-1232)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1420	ECL
Aroclor-1242 (PCB-1242)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1420	ECL
Aroclor-1248 (PCB-1248)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1420	ECL
Aroclor-1254 (PCB-1254)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1420	ECL
Aroclor-1260 (PCB-1260)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1420	ECL
Surrogate: Decachlorobiphenyl (BZ-209)	9.88	Limit: 20-140	% Rec	1	S4	06/24/19 0940	06/25/19 1420	ECL
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	52.5	Limit: 20-180	% Rec	1		06/24/19 0940	06/25/19 1420	ECL



Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

19F1127

Client Sample ID: **Outfall 013Q**
Sample Matrix: **Stormwater**
Lab Sample ID: **19F1127-03**

Collected By: **James Dilts**
Collection Date: **06/17/2019 18:05**

Wet Chemistry	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
EPA 353.2								
Nitrate/Nitrite as N	0.658	0.100	mg/L	1			06/27/19 1028	SRZ
EPA 410.4								
COD, Total	96	50	mg/L	1		06/20/19 1112	06/20/19 1506	EIP
SM 2540 D-11								
Total Suspended Solids	41	4.0	mg/L	4		06/21/19 1105	06/22/19 1021	EIP
SM 4500-N Org B+NH3 B+NH3 C-11								
Total Kjeldahl Nitrogen	3.36	1.00	mg/L	1		06/26/19 1732	06/27/19 1603	OCT
SM 4500-P E-11								
Phosphorus, Total (as P)	0.23	0.010	mg/L	1		06/24/19 1131	06/24/19 1439	SRZ
SM 5210 B-11								
BOD	45	2.0	mg/L	1		06/19/19 1712	06/24/19 1205	DPG
TKN+NO3 Calculation								
Nitrogen, Total as N	4.02	1.00	mg/L	1		06/27/19 1028	06/27/19 1603	OCT
Metals, Total by EPA 200 Series Methods								
EPA 200.2/EPA 200.7								
Iron	0.77	0.020	mg/L	1		06/20/19 1437	06/24/19 1450	APS
EPA 200.2/EPA 200.8								
Copper	0.0099	0.0010	mg/L	1		06/20/19 1443	06/21/19 1219	GHW
Lead	0.0072	0.0010	mg/L	1		06/20/19 1443	06/21/19 1219	GHW
Nickel	0.0024	0.0010	mg/L	1		06/20/19 1443	06/21/19 1219	GHW
Zinc	0.0603	0.0050	mg/L	1		06/20/19 1443	06/21/19 1219	GHW
Cadmium	<0.000250	0.000250	mg/L	1		06/20/19 1443	06/21/19 1219	GHW
Oil and Grease								
EPA 1664A								
Oil & Grease, HEM	<5.78	5.78	mg/L	1		06/27/19 1217	06/27/19 1359	OCT

Analyses Subcontracted to: Microbac Laboratories Inc., - Marietta, OH

Pesticides - GC/ECD	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
EPA 608.3								

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Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

19F1127

Client Sample ID: Outfall 013Q

Sample Matrix: Stormwater

Lab Sample ID: 19F1127-03

Collected By: James Dilts

Collection Date: 06/17/2019 18:05

Pesticides - GC/ECD	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
Aroclor-1016 (PCB-1016)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1529	ECL
Aroclor-1221 (PCB-1221)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1529	ECL
Aroclor-1232 (PCB-1232)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1529	ECL
Aroclor-1242 (PCB-1242)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1529	ECL
Aroclor-1248 (PCB-1248)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1529	ECL
Aroclor-1254 (PCB-1254)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1529	ECL
Aroclor-1260 (PCB-1260)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1529	ECL
Surrogate: Decachlorobiphenyl (BZ-209)	10.2	Limit: 20-140	% Rec	1	S4	06/24/19 0940	06/25/19 1529	ECL
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	64.8	Limit: 20-180	% Rec	1		06/24/19 0940	06/25/19 1529	ECL



Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

19F1127

Client Sample ID: **Outfall 013Q-Wet**
Sample Matrix: **Stormwater**
Lab Sample ID: **19F1127-04**

Collected By: **James Dilts**
Collection Date: **06/17/2019 22:45**

Wet Chemistry	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
EPA 353.2								
Nitrate/Nitrite as N	0.465	0.100	mg/L	1			06/27/19 1035	SRZ
EPA 410.4								
COD, Total	<50	50	mg/L	1		06/20/19 1112	06/20/19 1506	EIP
SM 2540 D-11								
Total Suspended Solids	54	4.0	mg/L	4		06/21/19 1105	06/22/19 1021	EIP
SM 4500-N Org B+NH3 B+NH3 C-11								
Total Kjeldahl Nitrogen	1.96	1.00	mg/L	1		06/26/19 1732	06/27/19 1603	OCT
SM 4500-P E-11								
Phosphorus, Total (as P)	0.13	0.010	mg/L	1		06/24/19 1131	06/24/19 1438	SRZ
SM 5210 B-11								
BOD	8.5	2.0	mg/L	1		06/19/19 1716	06/24/19 1210	DPG
TKN+NO3 Calculation								
Nitrogen, Total as N	2.42	1.00	mg/L	1		06/27/19 1035	06/27/19 1603	OCT
Metals, Total by EPA 200 Series Methods								
EPA 200.2/EPA 200.7								
Iron	0.74	0.020	mg/L	1		06/20/19 1437	06/24/19 1454	APS
EPA 200.2/EPA 200.8								
Copper	0.0173	0.0010	mg/L	1		06/20/19 1443	06/21/19 1221	GHW
Lead	0.0120	0.0010	mg/L	1		06/20/19 1443	06/21/19 1221	GHW
Nickel	0.0040	0.0010	mg/L	1		06/20/19 1443	06/21/19 1221	GHW
Zinc	0.0741	0.0050	mg/L	1		06/20/19 1443	06/21/19 1221	GHW
Cadmium	<0.000250	0.000250	mg/L	1		06/20/19 1443	06/21/19 1221	GHW
Oil and Grease								
EPA 1664A								
Oil & Grease, HEM	<5.78	5.78	mg/L	1		06/27/19 1217	06/27/19 1359	OCT

Analyses Subcontracted to: Microbac Laboratories Inc., - Marietta, OH

Pesticides - GC/ECD	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
EPA 608.3								

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19F1127

Client Sample ID: Outfall 013Q-Wet

Sample Matrix: Stormwater

Lab Sample ID: 19F1127-04

Collected By: James Dilts

Collection Date: 06/17/2019 22:45

Pesticides - GC/ECD	Result	RL	Units	Dilution	Note	Prepared	Analyzed	Analyst
Aroclor-1016 (PCB-1016)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1621	ECL
Aroclor-1221 (PCB-1221)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1621	ECL
Aroclor-1232 (PCB-1232)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1621	ECL
Aroclor-1242 (PCB-1242)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1621	ECL
Aroclor-1248 (PCB-1248)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1621	ECL
Aroclor-1254 (PCB-1254)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1621	ECL
Aroclor-1260 (PCB-1260)	<0.500	0.500	ug/L	1		06/24/19 0940	06/25/19 1621	ECL
Surrogate: Decachlorobiphenyl (BZ-209)	8.43	Limit: 20-140	% Rec	1	S4	06/24/19 0940	06/25/19 1621	ECL
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	63.1	Limit: 20-180	% Rec	1		06/24/19 0940	06/25/19 1621	ECL



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19F1127

Batch Quality Control Summary: Microbac Laboratories, Inc. - Baltimore

Wet Chemistry	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1925075 - WetChem_Water_Prep - SM 5210 B-11										
Blank (1925075-BLK1)				Prepared: 06/19/2019 Analyzed: 06/24/2019						
BOD	<2.0	2.0	mg/L							
LCS (1925075-BS1)				Prepared: 06/19/2019 Analyzed: 06/24/2019						
BOD	181	2.0	mg/L	200		91.3	84.6-115.4			
Duplicate (1925075-DUP1)				Source: 19F0956-01		Prepared: 06/19/2019 Analyzed: 06/24/2019				
BOD	<2.0	2.0	mg/L		ND				20	
Batch 1925187 - WetChem_Water_Prep - EPA 410.4										
Blank (1925187-BLK1)				Prepared & Analyzed: 06/20/2019						
COD, Total	<50	50	mg/L							
LCS (1925187-BS1)				Prepared & Analyzed: 06/20/2019						
COD, Total	980	50	mg/L	1000		97.9	90-110			
Duplicate (1925187-DUP1)				Source: 19F0064-01		Prepared & Analyzed: 06/20/2019				
COD, Total	568	50	mg/L		557			1.87	20	
Matrix Spike (1925187-MS1)				Source: 19F0064-01		Prepared & Analyzed: 06/20/2019				
COD, Total	991	50	mg/L	400	557	108	90-110			
Batch 1925321 - WetChem_Water_Prep - SM 2540 D-11										
Blank (1925321-BLK1)				Prepared: 06/21/2019 Analyzed: 06/22/2019						
Total Suspended Solids	<1.0	1.0	mg/L							
Blank (1925321-BLK2)				Prepared: 06/21/2019 Analyzed: 06/22/2019						
Total Suspended Solids	<1.0	1.0	mg/L							
LCS (1925321-BS1)				Prepared: 06/21/2019 Analyzed: 06/22/2019						
Total Suspended Solids	100	10	mg/L	100		101	90-110			
LCS (1925321-BS2)				Prepared: 06/21/2019 Analyzed: 06/22/2019						
Total Suspended Solids	100	10	mg/L	100		102	90-110			
Duplicate (1925321-DUP1)				Source: 19F1132-05		Prepared: 06/21/2019 Analyzed: 06/22/2019				
Total Suspended Solids	460	20	mg/L		440			3.56	10	
Duplicate (1925321-DUP2)				Source: 19F1132-02		Prepared: 06/21/2019 Analyzed: 06/22/2019				
Total Suspended Solids	51	13	mg/L		48			5.41	10	
Duplicate (1925321-DUP3)				Source: 19F1180-01		Prepared: 06/21/2019 Analyzed: 06/22/2019				
Total Suspended Solids	160	10	mg/L		170			7.81	10	
Batch 1926009 - WetChem_Water_Prep - SM 4500-P E-11										
Blank (1926009-BLK1)				Prepared & Analyzed: 06/24/2019						
Phosphorus, Total (as P)	<0.010	0.010	mg/L							
LCS (1926009-BS1)				Prepared & Analyzed: 06/24/2019						
Phosphorus, Total (as P)	0.531	0.010	mg/L	0.50		106	90-110			

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Wet Chemistry	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1926009 - WetChem_Water_Prep - SM 4500-P E-11										
Duplicate (1926009-DUP1)	Source: 19F1185-01		Prepared & Analyzed: 06/24/2019							
Phosphorus, Total (as P)	0.0251	0.010	mg/L		0.0249			0.800	20	
Duplicate (1926009-DUP2)	Source: 19F1141-01		Prepared & Analyzed: 06/24/2019							
Phosphorus, Total (as P)	0.222	0.010	mg/L		0.222			0.270	20	
Matrix Spike (1926009-MS1)	Source: 19F1185-01		Prepared & Analyzed: 06/24/2019							
Phosphorus, Total (as P)	0.311	0.010	mg/L	0.25	0.0249	114	90-110			
Matrix Spike (1926009-MS2)	Source: 19F1141-01		Prepared & Analyzed: 06/24/2019							
Phosphorus, Total (as P)	0.596	0.010	mg/L	0.25	0.222	150	90-110			
Batch 1926218 - WetChem_Water_Prep - SM 4500-N Org B+NH3 B+NH3 C-11										
Blank (1926218-BLK1)	Prepared: 06/26/2019 Analyzed: 06/27/2019									
Total Kjeldahl Nitrogen	<1.00	1.00	mg/L							
LCS (1926218-BS1)	Prepared: 06/26/2019 Analyzed: 06/27/2019									
Total Kjeldahl Nitrogen	19.6	1.00	mg/L	20.0		98.0	89.6-111			
Duplicate (1926218-DUP1)	Source: 19F0079-01		Prepared: 06/26/2019 Analyzed: 06/27/2019							
Total Kjeldahl Nitrogen	1.40	1.00	mg/L		1.40			0.00	14	
Duplicate (1926218-DUP2)	Source: 19F0082-01		Prepared: 06/26/2019 Analyzed: 06/27/2019							
Total Kjeldahl Nitrogen	1.40	1.00	mg/L		1.40			0.00	14	
Matrix Spike (1926218-MS1)	Source: 19F0079-01		Prepared: 06/26/2019 Analyzed: 06/27/2019							
Total Kjeldahl Nitrogen	19.6	1.00	mg/L	20.0	1.40	91.0	80-110			
Matrix Spike (1926218-MS2)	Source: 19F0082-01		Prepared: 06/26/2019 Analyzed: 06/27/2019							
Total Kjeldahl Nitrogen	20.4	1.00	mg/L	20.0	1.40	95.2	80-110			
Batch 1926240 - WetChem_Water_Prep - EPA 353.2										
Blank (1926240-BLK1)	Prepared & Analyzed: 06/27/2019									
Nitrate/Nitrite as N	<0.100	0.100	mg/L							
Blank (1926240-BLK2)	Prepared & Analyzed: 06/27/2019									
Nitrate/Nitrite as N	<0.100	0.100	mg/L							
LCS (1926240-BS1)	Prepared & Analyzed: 06/27/2019									
Nitrate/Nitrite as N	2.49		mg/L	2.50		99.5	90-110			
LCS (1926240-BS2)	Prepared & Analyzed: 06/27/2019									
Nitrate/Nitrite as N	2.52		mg/L	2.50		101	90-110			
Duplicate (1926240-DUP1)	Source: 19F1422-03		Prepared & Analyzed: 06/27/2019							
Nitrate/Nitrite as N	0.202	0.100	mg/L		0.175			14.6	20	
Duplicate (1926240-DUP2)	Source: 19F1422-04		Prepared & Analyzed: 06/27/2019							
Nitrate/Nitrite as N	<0.100	0.100	mg/L		ND				20	
Duplicate (1926240-DUP3)	Source: 19F1422-05		Prepared & Analyzed: 06/27/2019							
Nitrate/Nitrite as N	0.183	0.100	mg/L		0.192			4.79	20	
Duplicate (1926240-DUP4)	Source: 19F1422-06		Prepared & Analyzed: 06/27/2019							
Nitrate/Nitrite as N	<0.100	0.100	mg/L		ND				20	

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Wet Chemistry	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1926240 - WetChem_Water_Prep - EPA 353.2										
Matrix Spike (1926240-MS1)	Source: 19F1422-03		Prepared & Analyzed: 06/27/2019							
Nitrate/Nitrite as N	2.19	0.100	mg/L	2.00	0.175	101	90-110			
Matrix Spike (1926240-MS2)	Source: 19F1422-04		Prepared & Analyzed: 06/27/2019							
Nitrate/Nitrite as N	1.90	0.100	mg/L	2.00	ND	94.8	90-110			
Matrix Spike (1926240-MS3)	Source: 19F1422-05		Prepared & Analyzed: 06/27/2019							
Nitrate/Nitrite as N	2.30	0.100	mg/L	2.00	0.192	105	90-110			
Matrix Spike (1926240-MS4)	Source: 19F1422-06		Prepared & Analyzed: 06/27/2019							
Nitrate/Nitrite as N	2.04	0.100	mg/L	2.00	ND	102	90-110			
Metals, Total by EPA 200 Series Methods	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1925264 - EPA 200.2 ICP_W - EPA 200.7										
Blank (1925264-BLK1)	Prepared: 06/20/2019 Analyzed: 06/24/2019									
Iron	<0.020	0.020	mg/L							B11
LCS (1925264-BS1)	Prepared: 06/20/2019 Analyzed: 06/24/2019									
Iron	5.47	0.020	mg/L	5.0		109	85-115			B10
Duplicate (1925264-DUP1)	Source: 19F1127-04		Prepared: 06/20/2019 Analyzed: 06/24/2019							
Iron	0.752	0.020	mg/L		0.738			1.92	20	
Matrix Spike (1925264-MS1)	Source: 19F1127-04		Prepared: 06/20/2019 Analyzed: 06/24/2019							
Iron	6.10	0.020	mg/L	5.0	0.738	107	75-125			
Batch 1925265 - EPA 200.2 ICPMS_W - EPA 200.8										
Blank (1925265-BLK1)	Prepared: 06/20/2019 Analyzed: 06/21/2019									
Copper	<0.0010	0.0010	mg/L							
Nickel	<0.0010	0.0010	mg/L							
Lead	<0.0010	0.0010	mg/L							
Zinc	<0.0050	0.0050	mg/L							
Cadmium	<0.000250	0.000250	mg/L							
LCS (1925265-BS1)	Prepared: 06/20/2019 Analyzed: 06/21/2019									
Copper	0.197	0.0010	mg/L	0.200		98.4	85-115			
Nickel	0.205	0.0010	mg/L	0.200		102	85-115			
Lead	0.200	0.0010	mg/L	0.200		100	85-115			
Zinc	0.199	0.0050	mg/L	0.200		99.7	85-115			
Cadmium	0.201	0.000250	mg/L	0.200		100	85-115			
Duplicate (1925265-DUP1)	Source: 19F1139-01		Prepared: 06/20/2019 Analyzed: 06/21/2019							
Copper	0.00210	0.0010	mg/L		0.00209			0.429	20	
Nickel	0.00203	0.0010	mg/L		0.00182			10.6	20	
Lead	<0.0010	0.0010	mg/L		0.000116			4.41	20	
Zinc	0.0117	0.0050	mg/L		0.0131			11.4	20	
Cadmium	<0.000250	0.000250	mg/L		0.0000790			6.54	20	
Duplicate (1925265-DUP2)	Source: 19F1144-01		Prepared: 06/20/2019 Analyzed: 06/21/2019							

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Metals, Total by EPA 200 Series Methods	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1925265 - EPA 200.2 ICPMS_W - EPA 200.8										
Duplicate (1925265-DUP2)	Source: 19F1144-01			Prepared: 06/20/2019 Analyzed: 06/21/2019						
Copper	0.00224	0.0010	mg/L		0.00231			2.94	20	
Nickel	0.00198	0.0010	mg/L		0.00227			13.4	20	
Lead	<0.0010	0.0010	mg/L		ND				20	
Zinc	0.0121	0.0050	mg/L		0.0125			3.66	20	
Cadmium	<0.000250	0.000250	mg/L		0.000111			24.2	20	R6
Matrix Spike (1925265-MS1)	Source: 19F1139-01			Prepared: 06/20/2019 Analyzed: 06/21/2019						
Copper	0.195	0.0010	mg/L	0.200	0.00209	96.3	70-130			
Nickel	0.205	0.0010	mg/L	0.200	0.00182	101	70-130			
Lead	0.192	0.0010	mg/L	0.200	0.000116	96.0	70-130			
Zinc	0.209	0.0050	mg/L	0.200	0.0131	98.0	70-130			
Cadmium	0.205	0.000250	mg/L	0.200	0.0000790	102	70-130			
Matrix Spike (1925265-MS2)	Source: 19F1144-01			Prepared: 06/20/2019 Analyzed: 06/21/2019						
Copper	0.196	0.0010	mg/L	0.200	0.00231	96.7	70-130			
Nickel	0.203	0.0010	mg/L	0.200	0.00227	100	70-130			
Lead	0.192	0.0010	mg/L	0.200	ND	95.9	70-130			
Zinc	0.210	0.0050	mg/L	0.200	0.0125	98.7	70-130			
Cadmium	0.203	0.000250	mg/L	0.200	0.000111	101	70-130			
Oil and Grease	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1926244 - EPA 1664A - EPA 1664A										
Blank (1926244-BLK1)	Prepared & Analyzed: 06/27/2019									
Oil & Grease, HEM	<5.00	5.00	mg/L							
LCS (1926244-BS1)	Prepared & Analyzed: 06/27/2019									
Oil & Grease, HEM	31.3	5.00	mg/L	40.0		78.2	78-114			
Matrix Spike (1926244-MS1)	Source: 19F0563-01			Prepared & Analyzed: 06/27/2019						
Oil & Grease, HEM	46.7	5.21	mg/L	40.9	11.5	86.2	78-114			
Batch Quality Control Summary: Microbac Laboratories Inc., - Marietta, OH										

Pesticides - GC/ECD	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B9F1330 - 3510C_8082 - EPA 608.3										
Blank (B9F1330-BLK1)	Prepared: 06/24/2019 Analyzed: 06/25/2019									
Aroclor-1016 (PCB-1016)	<0.500	0.500	ug/L							
Aroclor-1016 (PCB-1016) [2C]	<0.500	0.500	ug/L							
Aroclor-1221 (PCB-1221)	<0.500	0.500	ug/L							
Aroclor-1221 (PCB-1221) [2C]	<0.500	0.500	ug/L							
Aroclor-1232 (PCB-1232)	<0.500	0.500	ug/L							

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Pesticides - GC/ECD	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B9F1330 - 3510C_8082 - EPA 608.3										
Blank (B9F1330-BLK1)				Prepared: 06/24/2019 Analyzed: 06/25/2019						
Aroclor-1232 (PCB-1232) [2C]	<0.500	0.500	ug/L							
Aroclor-1242 (PCB-1242)	<0.500	0.500	ug/L							
Aroclor-1242 (PCB-1242) [2C]	<0.500	0.500	ug/L							
Aroclor-1248 (PCB-1248)	<0.500	0.500	ug/L							
Aroclor-1248 (PCB-1248) [2C]	<0.500	0.500	ug/L							
Aroclor-1254 (PCB-1254)	<0.500	0.500	ug/L							
Aroclor-1254 (PCB-1254) [2C]	<0.500	0.500	ug/L							
Aroclor-1260 (PCB-1260)	<0.500	0.500	ug/L							
Aroclor-1260 (PCB-1260) [2C]	<0.500	0.500	ug/L							
Surrogate: Decachlorobiphenyl (BZ-209)	0.120		ug/L	0.200		60.2	20-140			
Surrogate: Decachlorobiphenyl (BZ-209) [2C]	0.00		ug/L	0.200			20-140			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	0.151		ug/L	0.200		75.7	20-180			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene [2C]	0.00		ug/L	0.200			20-180			
Blank (B9F1330-BLK2)				Prepared: 06/24/2019 Analyzed: 07/05/2019						
Aroclor-1016 (PCB-1016)	<0.500	0.500	ug/L							
Aroclor-1016 (PCB-1016) [2C]	<0.500	0.500	ug/L							
Aroclor-1221 (PCB-1221)	<0.500	0.500	ug/L							
Aroclor-1221 (PCB-1221) [2C]	<0.500	0.500	ug/L							
Aroclor-1232 (PCB-1232)	<0.500	0.500	ug/L							
Aroclor-1232 (PCB-1232) [2C]	<0.500	0.500	ug/L							
Aroclor-1242 (PCB-1242)	<0.500	0.500	ug/L							
Aroclor-1242 (PCB-1242) [2C]	<0.500	0.500	ug/L							
Aroclor-1248 (PCB-1248)	<0.500	0.500	ug/L							
Aroclor-1248 (PCB-1248) [2C]	<0.500	0.500	ug/L							
Aroclor-1254 (PCB-1254)	<0.500	0.500	ug/L							
Aroclor-1254 (PCB-1254) [2C]	<0.500	0.500	ug/L							
Aroclor-1260 (PCB-1260)	<0.500	0.500	ug/L							
Aroclor-1260 (PCB-1260) [2C]	<0.500	0.500	ug/L							
Surrogate: Decachlorobiphenyl (BZ-209)	0.110		ug/L	0.200		55.0	20-140			
Surrogate: Decachlorobiphenyl (BZ-209) [2C]	0.118		ug/L	0.200		59.2	20-140			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	0.131		ug/L	0.200		65.3	20-180			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene [2C]	0.143		ug/L	0.200		71.3	20-180			
LCS (B9F1330-BS1)				Prepared: 06/24/2019 Analyzed: 06/25/2019						
Aroclor-1016 (PCB-1016)	2.00	0.500	ug/L	2.50		80.1	50-140			
Aroclor-1016 (PCB-1016) [2C]	<0.500	0.500	ug/L	2.50			50-140			
Aroclor-1260 (PCB-1260)	1.99	0.500	ug/L	2.50		79.6	8-140			
Aroclor-1260 (PCB-1260) [2C]	<0.500	0.500	ug/L	2.50			8-140			
Surrogate: Decachlorobiphenyl (BZ-209)	0.117		ug/L	0.200		58.6	20-140			
Surrogate: Decachlorobiphenyl (BZ-209) [2C]	0.00		ug/L	0.200			20-140			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	0.152		ug/L	0.200		76.2	20-180			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene [2C]	0.00		ug/L	0.200			20-180			
Matrix Spike (B9F1330-MS1)				Source: 19F1127-01 Prepared: 06/24/2019 Analyzed: 06/25/2019						
Aroclor-1016 (PCB-1016)	1.43	0.500	ug/L	2.50	ND	57.0	50-140			
Aroclor-1016 (PCB-1016) [2C]	<0.500	0.500	ug/L	2.50	ND		50-140			

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Pesticides - GC/ECD	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B9F1330 - 3510C_8082 - EPA 608.3										
Matrix Spike (B9F1330-MS1) Source: 19F1127-01 Prepared: 06/24/2019 Analyzed: 06/25/2019										
Aroclor-1260 (PCB-1260)	1.30	0.500	ug/L	2.50	ND	51.9	8-140			
Aroclor-1260 (PCB-1260) [2C]	<0.500	0.500	ug/L	2.50	ND		8-140			
Surrogate: Decachlorobiphenyl (BZ-209)	0.0189		ug/L	0.200		9.43	20-140			S4
Surrogate: Decachlorobiphenyl (BZ-209) [2C]	0.00		ug/L	0.200			20-140			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	0.114		ug/L	0.200		57.1	20-180			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene [2C]	0.00		ug/L	0.200			20-180			
Matrix Spike (B9F1330-MS2) Source: 19F1127-02 Prepared: 06/24/2019 Analyzed: 06/25/2019										
Aroclor-1016 (PCB-1016)	1.67	0.500	ug/L	2.50	ND	66.7	50-140			
Aroclor-1016 (PCB-1016) [2C]	<0.500	0.500	ug/L	2.50	ND		50-140			
Aroclor-1260 (PCB-1260)	1.48	0.500	ug/L	2.50	ND	59.1	8-140			
Aroclor-1260 (PCB-1260) [2C]	<0.500	0.500	ug/L	2.50	ND		8-140			
Surrogate: Decachlorobiphenyl (BZ-209)	0.0224		ug/L	0.200		11.2	20-140			S4
Surrogate: Decachlorobiphenyl (BZ-209) [2C]	0.00		ug/L	0.200			20-140			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	0.123		ug/L	0.200		61.3	20-180			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene [2C]	0.00		ug/L	0.200			20-180			
Matrix Spike (B9F1330-MS3) Source: 19F1127-03 Prepared: 06/24/2019 Analyzed: 06/25/2019										
Aroclor-1016 (PCB-1016)	1.62	0.500	ug/L	2.50	ND	65.0	50-140			
Aroclor-1016 (PCB-1016) [2C]	<0.500	0.500	ug/L	2.50	ND		50-140			
Aroclor-1260 (PCB-1260)	1.46	0.500	ug/L	2.50	ND	58.3	8-140			
Aroclor-1260 (PCB-1260) [2C]	<0.500	0.500	ug/L	2.50	ND		8-140			
Surrogate: Decachlorobiphenyl (BZ-209)	0.0256		ug/L	0.200		12.8	20-140			S4
Surrogate: Decachlorobiphenyl (BZ-209) [2C]	0.00		ug/L	0.200			20-140			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	0.117		ug/L	0.200		58.6	20-180			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene [2C]	0.00		ug/L	0.200			20-180			
Matrix Spike (B9F1330-MS4) Source: 19F1127-04 Prepared: 06/24/2019 Analyzed: 06/25/2019										
Aroclor-1016 (PCB-1016)	1.98	0.556	ug/L	2.78	ND	71.4	50-140			
Aroclor-1016 (PCB-1016) [2C]	<0.556	0.556	ug/L	2.78	ND		50-140			
Aroclor-1260 (PCB-1260)	1.96	0.556	ug/L	2.78	ND	70.6	8-140			
Aroclor-1260 (PCB-1260) [2C]	<0.556	0.556	ug/L	2.78	ND		8-140			
Surrogate: Decachlorobiphenyl (BZ-209)	0.0356		ug/L	0.222		16.0	20-140			S4
Surrogate: Decachlorobiphenyl (BZ-209) [2C]	0.00		ug/L	0.222			20-140			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	0.151		ug/L	0.222		67.8	20-180			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene [2C]	0.00		ug/L	0.222			20-180			
Matrix Spike Dup (B9F1330-MSD1) Source: 19F1127-01 Prepared: 06/24/2019 Analyzed: 06/25/2019										
Aroclor-1016 (PCB-1016)	1.13	0.500	ug/L	2.50	ND	45.1	50-140	23.4	36	M2
Aroclor-1016 (PCB-1016) [2C]	<0.500	0.500	ug/L	2.50	ND		50-140		36	
Aroclor-1260 (PCB-1260)	0.992	0.500	ug/L	2.50	ND	39.7	8-140	26.7	38	
Aroclor-1260 (PCB-1260) [2C]	<0.500	0.500	ug/L	2.50	ND		8-140		38	
Surrogate: Decachlorobiphenyl (BZ-209)	0.0115		ug/L	0.200		5.73	20-140			S4
Surrogate: Decachlorobiphenyl (BZ-209) [2C]	0.00		ug/L	0.200			20-140			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	0.0831		ug/L	0.200		41.5	20-180			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene [2C]	0.00		ug/L	0.200			20-180			
Matrix Spike Dup (B9F1330-MSD2) Source: 19F1127-02 Prepared: 06/24/2019 Analyzed: 06/25/2019										
Aroclor-1016 (PCB-1016)	1.65	0.500	ug/L	2.50	ND	65.8	50-140	1.25	36	

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Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

19F1127

Pesticides - GC/ECD	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B9F1330 - 3510C_8082 - EPA 608.3										
Matrix Spike Dup (B9F1330-MSD2) Source: 19F1127-02 Prepared: 06/24/2019 Analyzed: 06/25/2019										
Aroclor-1016 (PCB-1016) [2C]	<0.500	0.500	ug/L	2.50	ND		50-140		36	
Aroclor-1260 (PCB-1260)	1.46	0.500	ug/L	2.50	ND	58.3	8-140	1.44	38	
Aroclor-1260 (PCB-1260) [2C]	<0.500	0.500	ug/L	2.50	ND		8-140		38	
Surrogate: Decachlorobiphenyl (BZ-209)	0.0276		ug/L	0.200		13.8	20-140			S4
Surrogate: Decachlorobiphenyl (BZ-209) [2C]	0.00		ug/L	0.200			20-140			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	0.112		ug/L	0.200		55.9	20-180			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene [2C]	0.00		ug/L	0.200			20-180			
Matrix Spike Dup (B9F1330-MSD3) Source: 19F1127-03 Prepared: 06/24/2019 Analyzed: 06/25/2019										
Aroclor-1016 (PCB-1016)	1.56	0.500	ug/L	2.50	ND	62.4	50-140	4.13	36	
Aroclor-1016 (PCB-1016) [2C]	<0.500	0.500	ug/L	2.50	ND		50-140		36	
Aroclor-1260 (PCB-1260)	1.45	0.500	ug/L	2.50	ND	58.1	8-140	0.287	38	
Aroclor-1260 (PCB-1260) [2C]	<0.500	0.500	ug/L	2.50	ND		8-140		38	
Surrogate: Decachlorobiphenyl (BZ-209)	0.0186		ug/L	0.200		9.29	20-140			S4
Surrogate: Decachlorobiphenyl (BZ-209) [2C]	0.00		ug/L	0.200			20-140			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	0.109		ug/L	0.200		54.4	20-180			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene [2C]	0.00		ug/L	0.200			20-180			
Matrix Spike Dup (B9F1330-MSD4) Source: 19F1127-04 Prepared: 06/24/2019 Analyzed: 06/25/2019										
Aroclor-1016 (PCB-1016)	1.67	0.500	ug/L	2.50	ND	66.9	50-140	16.9	36	
Aroclor-1016 (PCB-1016) [2C]	<0.500	0.500	ug/L	2.50	ND		50-140		36	
Aroclor-1260 (PCB-1260)	1.48	0.500	ug/L	2.50	ND	59.1	8-140	28.2	38	
Aroclor-1260 (PCB-1260) [2C]	<0.500	0.500	ug/L	2.50	ND		8-140		38	
Surrogate: Decachlorobiphenyl (BZ-209)	0.0254		ug/L	0.200		12.7	20-140			S4
Surrogate: Decachlorobiphenyl (BZ-209) [2C]	0.00		ug/L	0.200			20-140			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	0.126		ug/L	0.200		62.8	20-180			
Surrogate: 2,4,5,6-Tetrachloro-m-xylene [2C]	0.00		ug/L	0.200			20-180			



Microbac Laboratories, Inc. - Baltimore

CERTIFICATE OF ANALYSIS

19F1127

Definitions

B10:	Target analyte detected in continuing calibration blank >2.2 times the MDL but less than the reporting limit. Concentration found in the samples was 10 times the concentration found in the blank. No impact on data.
B11:	Target analyte detected in continuing calibration blank >2.2 times the MDL but less than the reporting limit. Sample result was less than the reporting limit. No impact on data.
M2:	Matrix spike recovery is outside of acceptance limits, biased low.
R6:	Sample Duplicate RPD is not applicable due to result less than reporting limit.
RL:	Reporting Limit
RPD:	Relative Percent Difference
S4:	Surrogate recovery can not be accurately measured due to matrix interference.
V13:	Interferent check recovery was above acceptance limits. The sample(s) did not contain interferences that would affect the sample result.

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 5.2°C

Cooler Inspection Checklist

Ice Present or not required?	Yes	Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes	Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes	Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes	Sample type identified on COC?	Yes
Correct type of Containers Received	Yes	Correct number of containers listed on COC?	Yes
Containers Intact?	Yes	COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes	Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes	Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes	Preservation checks meet method requirements?	No
VOA vials have zero headspace, or not recd.?	Yes		

Project Requested Certification(s)

Microbac Laboratories Inc., - Marietta, OH
460187
Microbac Laboratories, Inc. - Baltimore
E871126

Virginia Department of General Services
Florida - NELAC

Report Comments

Samples were received in proper condition and the reported results conform to applicable accreditation standard unless otherwise noted.

The data and information on this, and other accompanying documents, represents only the sample(s) analyzed. This report is incomplete unless all pages indicated in the footnote are present and an authorized signature is included.

Reviewed and Approved By:

Evelyn Shinas
Customer Relationship Coordinator
Reported: 10/30/2019 11:43

Microbac Laboratories, Inc.

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SUBCONTRACT ORDER

19F1127

SENDING LABORATORY:

Microbac Laboratories, Inc. - Baltimore
2101 Van Deman Street
Baltimore, MD 21224
Phone: 410.633.1800
Project Manager: Jake Mason

RECEIVING LABORATORY:

Microbac - OVD
158 Starlite Dr
Marietta, OH 45750
Phone: (800) 373-4071

Project Info:

Project Name:	Benning Rd. Gen Station - P	Client:	PEPCO-Benning Rd - G0055
Project No:	Benning Rd. Gen Station	Project Type:	ENV-WasteWater
		Project Location:	Washington, DC
		Report TAT:	10
		Due:	07/05/2019 17:00

Sample ID: 19F1127-01

Matrix: Stormwater

Sampled: 06/17/2019 17:55

Analysis	Method	Analysis Due	Expires	Network \$
608 PCB	EPA 608	07/03/2019 15:00	06/24/2019 17:55	\$ 72.00
Aroclor 1016	0.1 µg/L	Aroclor 1221	0.1 µg/L	
Aroclor 1232	0.1 µg/L	Aroclor 1242	0.1 µg/L	
Aroclor 1248	0.1 µg/L	Aroclor 1254	0.1 µg/L	
Aroclor 1260	0.1 µg/L	Total PCBs	0.1 µg/L	
<i>Decachlorobiphenyl(Surr)</i>		<i>Tetrachloro-m-xylene(Surr)</i>		
Run MS/MSD on these samples				

Sample ID: 19F1127-02

Matrix: Stormwater

Sampled: 06/17/2019 22:42

Analysis	Method	Analysis Due	Expires	Network \$
608 PCB	EPA 608	07/03/2019 15:00	06/24/2019 22:42	\$ 72.00
Aroclor 1016	0.1 µg/L	Aroclor 1221	0.1 µg/L	
Aroclor 1232	0.1 µg/L	Aroclor 1242	0.1 µg/L	
Aroclor 1248	0.1 µg/L	Aroclor 1254	0.1 µg/L	
Aroclor 1260	0.1 µg/L	Total PCBs	0.1 µg/L	
<i>Decachlorobiphenyl(Surr)</i>		<i>Tetrachloro-m-xylene(Surr)</i>		
Run MS/MSD on these samples				

Sample ID: 19F1127-03

Matrix: Stormwater

Sampled: 06/17/2019 18:05

Analysis	Method	Analysis Due	Expires	Network \$
608 PCB	EPA 608	07/03/2019 15:00	06/24/2019 18:05	\$ 72.00
Aroclor 1016	0.1 µg/L	Aroclor 1221	0.1 µg/L	
Aroclor 1232	0.1 µg/L	Aroclor 1242	0.1 µg/L	
Aroclor 1248	0.1 µg/L	Aroclor 1254	0.1 µg/L	
Aroclor 1260	0.1 µg/L	Total PCBs	0.1 µg/L	
<i>Decachlorobiphenyl(Surr)</i>		<i>Tetrachloro-m-xylene(Surr)</i>		
Run MS/MSD on these samples				



SUBCONTRACT ORDER

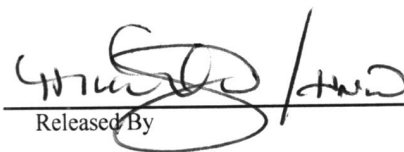
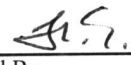
19F1127

Sample ID: 19F1127-04

Matrix: Stormwater

Sampled: 06/17/2019 22:45

Analysis	Method	Analysis Due	Expires	Network \$
608 PCB	EPA 608	07/03/2019 15:00	06/24/2019 22:45	\$ 72.00
Aroclor 1016	0.1 µg/L	Aroclor 1221	0.1 µg/L	
Aroclor 1232	0.1 µg/L	Aroclor 1242	0.1 µg/L	
Aroclor 1248	0.1 µg/L	Aroclor 1254	0.1 µg/L	
Aroclor 1260	0.1 µg/L	Total PCBs	0.1 µg/L	
Decachlorobiphenyl(Surr)		Tetrachloro-m-xylene(Surr)		
Run MS/MSD on these samples				

	06/20/19		
Released By	Date	Received By	Date
Released By	Date	Received By	Date



Microbac Laboratories Inc., Baltimore Division

2101 Van Deman St, Baltimore, MD 21224

Tel: 410-633-1800

Fax: 410-633-6553

www.microbac.com

Work Order Number:

19F1127/PCB's

Metals
etc.

Chain of Custody Record

Page 1 of 2

Instructions for completing the Chain of Custody Record on back.

Client Name POTOMAC ELECTRIC POWER CO	Project BENNING STORM WATER	Turnaround Time	QC and EDD Type (Required)
Address 3400 BENNING RD NE	Location BENNING SERVICE CENTER	<input checked="" type="checkbox"/> Standard (7 Business Days)	<input type="checkbox"/> Level I (NAC)
City, State, Zip WASHINGTON DC 20019	PO # 90016472	<input type="checkbox"/> RUSH* Needed By: _____	<input type="checkbox"/> Level II**
Contact FARIBA NAHVI	Compliance Monitoring? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	* Please notify lab prior to drop off.	<input type="checkbox"/> Level III**
Telephone # 202-381-6641	(1) Agency/Program NPDES		<input type="checkbox"/> Level IV**

Sampled by (PRINT) **JAMES DILTS** Sampler Signature *[Signature]* Sampler Phone # **202-359-8107** Sampler (DW) Cert# _____

Send Report via ☐ e-mail (address) **FNAHVI@PEPCO.COM** ☐ Mail ☐ Telephone ☐ Fax (fax #) _____

*** Matrix Types: Air(A), Childrens Product(CP), Food(F), Paint(P), Soil/Solid (S), Oil(O), Wipe(WI), Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify) **SS =**

Client Sample ID	Matrix***	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analysis										PCB Comments -
								PCB CWS (**)	OIL & GREASE	TSS	Cd, Cy, Ni	Pb, Zn	TOT. RECOVERABLE Fe	TOT. NITROGEN	TOT. PHOSPHORUS	TKN		
OUTFALL 101 - MANHOLE K	SS		✓	N	6-17-19	17:55	16	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	(*) QUANTIFY AROCHELONS 1242
OUTFALL 101 - MANHOLE K - WET	SS		✓		6-17-19	22:42	13	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	1254, 1260 MDL ≤ 1 ug/L
OUTFALL 013Q	SS	✓			6-17-19	18:05	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	(**) QUANTIFY 209 CONGENERS
OUTFALL 013Q - WET	SS		✓		6-17-19	22:45	14	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	METHOD 1668.B

STORM WATER

19F1127



Possible Hazard Identification ☐ Hazardous ☐ Non-Hazardous ☐ Radioactive Sample Disposition ☐ Dispose as appropriate ☐ Return ☐ Archive

Number of Containers: _____	Relinquished By (signature) <i>[Signature]</i>	Printed Name/Affiliation JAMES DILTS - PHI	Date/Time 6/19/19 1405	Received By (signature) <i>[Signature]</i>	Printed Name/Affiliation M. Q.
Cooler Number: 5.2	Relinquished By (signature) <i>[Signature]</i>	Printed Name/Affiliation MLI	Date/Time 6/19/19 1558	Received By (signature) <i>[Signature]</i>	Printed Name/Affiliation OLIA/19
Temp upon receipt (°C): _____	Relinquished By (signature) <i>[Signature]</i>	Printed Name/Affiliation _____	Date/Time _____	Received for Lab By (signature) <i>[Signature]</i>	Printed Name/Affiliation IN 2.11.19
Sample Received on Ice or Refrigerated from Client? Yes / No Yes	Relinquished By (signature) _____	Printed Name/Affiliation _____	Date/Time _____	Received for Lab By (signature) _____	Printed Name/Affiliation _____

**Microbac Laboratories Inc., Baltimore Division**

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Work Order Number:

Chain of Custody RecordPage 2 of 2

Instructions for completing the Chain of Custody Record on back.

Client Name <u>PEPCO</u>	Project <u>BENNING STORM WATER</u>	Turnaround Time	QC and EDD Type (Required)
Address <u>3400 BENNING RD NE</u>	Location <u>BENNING SERVICE CENTER</u>	<input checked="" type="checkbox"/> Standard (7 Business Days)	<input type="checkbox"/> Level I (NAC) <input type="checkbox"/> EDD
City, State, Zip <u>WASHINGTON DC 20015</u>	PO # <u>90016472</u>	<input type="checkbox"/> RUSH* Needed By: _____	<input type="checkbox"/> Level II** Format: _____
Contact <u>FARIBA MAHVI / Jim DUBS</u>	Compliance Monitoring? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	* Please notify lab prior to drop off.	<input type="checkbox"/> Level III** Comments: _____
Telephone # <u>202-331-6641</u>	(1) Agency/Program <u>NPDES</u>		<input type="checkbox"/> Level IV**
Sampled by (PRINT) <u>JAMES N. DUBS JR</u> Sampler Signature <u>[Signature]</u> Sampler Phone # <u>202-359-8107</u> Sampler (DW) Cert# _____			
Send Report via <input type="checkbox"/> e-mail (address) <u>FMAHVI@PEPCO.COM</u> <input type="checkbox"/> Mail <input type="checkbox"/> Telephone <input type="checkbox"/> Fax (fax #) _____			

*** Matrix Types: Air(A), Childrens Product(CP), Food(F), Paint(P), Soil/Solid (S), Oil(O), Wipe(WI), Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

Client Sample ID	Matrix**	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analysis										Comments	
								BOD	COD										
OUTFALL 101-MAN HOLE K (cm)	SS		✓	N	6-17-19	17:55	16	✓	✓										
OUTFALL 101-MAN HOLE K - WET	SS		✓	N	6-17-19	22:42	13	✓	✓										
OUTFALL 013Q	SS	✓		N	6-17-19	18:05	12	✓	✓										
OUT FALL 013Q - WET	SS		✓	N	6-17-19	22:45	14	✓	✓										

This space is reserved for lab use only.

Possible Hazard Identification <input type="checkbox"/> Hazardous <input type="checkbox"/> Non-Hazardous <input type="checkbox"/> Radioactive	Sample Disposition <input type="checkbox"/> Dispose as appropriate <input type="checkbox"/> Return <input type="checkbox"/> Archive				
Number of Containers: _____	Relinquished By (signature) <u>[Signature]</u>	Printed Name/Affiliation <u>JAMES DUBS JR</u>	Date/Time <u>6/19/19 1405</u>	Received By (signature) <u>[Signature]</u>	Printed Name/Affiliation _____
Cooler Number: <u>5.2</u>	Relinquished By (signature) <u>[Signature]</u>	Printed Name/Affiliation <u>MLT</u>	Date/Time <u>6/19/19 1550</u>	Received By (signature) <u>[Signature]</u>	Printed Name/Affiliation <u>26/19/19</u>
Temp upon receipt (°C): _____	Relinquished By (signature) _____	Printed Name/Affiliation _____	Date/Time _____	Received for Lab By (signature) <u>[Signature]</u>	Printed Name/Affiliation <u>1550</u>
Sample Received on Ice or Refrigerated from Client? Yes/No <u>(C)</u>	Relinquished By (signature) _____	Printed Name/Affiliation _____	Date/Time _____	Received for Lab By (signature) _____	Printed Name/Affiliation _____


Microbac Laboratories, Inc., Baltimore Division			
Control # 606-03			
Effective Date: 11/30/2016			
Page 1 of 1			

Sludge	Food	Swab	Other
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
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16	16	16	16
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82	82	82	82
83	83	83	83
84	84	84	84
85	85	85	85
86	86	86	86
87	87	87	87
88	88	88	88
89	89	89	89
90	90	90	90
91	91	91	91
92	92	92	92
93	93	93	93
94	94	94	94
95	95	95	95
96	96	96	96
97	97	97	97
98	98	98	98
99	99	99	99
100	100	100	100

All Acid preserved <2 pH		NaOH preserved >12 pH		All others >2 and <10 (usually 4-8)	
Sample ID:	19F1127-01	H ₂ SO ₄	HNO ₃	NaOH	+1 mls added to preserve 6246/19/19 JJ
Sample ID:		H ₂ SO ₄	HNO ₃	NaOH	mls added
Sample ID:		H ₂ SO ₄	HNO ₃	NaOH	mls added
Sample ID:		H ₂ SO ₄	HNO ₃	NaOH	mls added

H₂SO₄ - Sulfuric Acid, HNO₃ - Nitric Acid, NaOH - Sodium Hydroxide, ASC - Ascorbic Acid, NaTHIO - Sodium Thiosulfate

[illegible]


EPA Identification Number DC0000094		NPDES Permit Number DC0000094		Facility Name Benning Service Center		Form Approved 03/05/19 OMB No. 2040-0004	
Form 1 NPDES			U.S. Environmental Protection Agency Application for NPDES Permit to Discharge Wastewater GENERAL INFORMATION				
SECTION 1. ACTIVITIES REQUIRING AN NPDES PERMIT (40 CFR 122.21(f) and (f)(1))							
Activities Requiring an NPDES Permit	1.1		Applicants <i>Not Required</i> to Submit Form 1				
	1.1.1	Is the facility a new or existing publicly owned treatment works ? If yes, STOP. Do NOT complete Form 1. Complete Form 2A.			1.1.2	Is the facility a new or existing treatment works treating domestic sewage ? If yes, STOP. Do NOT complete Form 1. Complete Form 2S.	
			<input checked="" type="checkbox"/> No			<input checked="" type="checkbox"/> No	
	1.2		Applicants <i>Required</i> to Submit Form 1				
	1.2.1	Is the facility a concentrated animal feeding operation or a concentrated aquatic animal production facility ? <input type="checkbox"/> Yes → Complete Form 1 <input checked="" type="checkbox"/> No and Form 2B.			1.2.2	Is the facility an existing manufacturing, commercial, mining, or silvicultural facility that is currently discharging process wastewater ? <input type="checkbox"/> Yes → Complete Form 1 <input checked="" type="checkbox"/> No and Form 2C.	
			<input type="checkbox"/> Yes → Complete Form 1 <input checked="" type="checkbox"/> No and Form 2D.			<input type="checkbox"/> Yes → Complete Form 1 <input checked="" type="checkbox"/> No and Form 2E.	
1.2.3	Is the facility a new manufacturing, commercial, mining, or silvicultural facility that has not yet commenced to discharge ? <input type="checkbox"/> Yes → Complete Form 1 <input checked="" type="checkbox"/> No and Form 2D.			1.2.4	Is the facility a new or existing manufacturing, commercial, mining, or silvicultural facility that discharges only nonprocess wastewater ? <input type="checkbox"/> Yes → Complete Form 1 <input checked="" type="checkbox"/> No and Form 2E.		
		<input type="checkbox"/> Yes → Complete Form 1 <input checked="" type="checkbox"/> No and Form 2F unless exempted by 40 CFR 122.26(b)(14)(x) or (b)(15).					
SECTION 2. NAME, MAILING ADDRESS, AND LOCATION (40 CFR 122.21(f)(2))							
Name, Mailing Address, and Location	2.1		Facility Name				
			Benning Service Center				
	2.2		EPA Identification Number				
			DC0000094				
	2.3		Facility Contact				
			Name (first and last) Tammy D. Sanford		Title Manager Environmental Management		Phone number (412) 400-7216
			Email address tammy.sanford@exeloncorp.com				
	2.4		Facility Mailing Address				
		Street or P.O. box 701 Ninth Street, NW Room 6220					
		City or town Washington		State D.C.		ZIP code 20068	


EPA Identification Number DC0000094		NPDES Permit Number DC0000094		Facility Name Benning Service Center		Form Approved 03/05/19 OMB No. 2040-0004	
Name, Mailing Address, and Location Continued	2.5	Facility Location					
		Street, route number, or other specific identifier 3400 Benning Road, NE					
		County name		County code (if known)			
		City or town Washington		State D.C.		ZIP code 20019	
SECTION 3. SIC AND NAICS CODES (40 CFR 122.21(f)(3))							
SIC and NAICS Codes	3.1	SIC Code(s)		Description (optional)			
		4911-99		Electric Services			
	3.2	NAICS Code(s)		Description (optional)			
SECTION 4. OPERATOR INFORMATION (40 CFR 122.21(f)(4))							
Operator Information	4.1	Name of Operator					
		Potomac Electric Power Company					
	4.2	Is the name you listed in Item 4.1 also the owner? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
	4.3	Operator Status					
<input type="checkbox"/> Public—federal <input type="checkbox"/> Public—state <input type="checkbox"/> Other public (specify) _____ <input checked="" type="checkbox"/> Private <input type="checkbox"/> Other (specify) _____							
4.4	Phone Number of Operator						
	(202) 872-2000						
Operator Information Continued	4.5	Operator Address					
		Street or P.O. Box 701 Ninth Street, NW					
		City or town Washington		State D.C.		ZIP code 20068	
		Email address of operator tammy.sanford@exeloncorp.com					
SECTION 5. INDIAN LAND (40 CFR 122.21(f)(5))							
Indian Land	5.1	Is the facility located on Indian Land? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					

EPA Identification Number DC0000094		NPDES Permit Number DC0000094		Facility Name Benning Service Center		Form Approved 03/05/19 OMB No. 2040-0004							
SECTION 6. EXISTING ENVIRONMENTAL PERMITS (40 CFR 122.21(f)(6))													
Existing Environmental Permits	6.1	Existing Environmental Permits (check all that apply and print or type the corresponding permit number for each)											
		<input checked="" type="checkbox"/> NPDES (discharges to surface water) DC0000094	<input checked="" type="checkbox"/> RCRA (hazardous wastes) DC000819516	<input type="checkbox"/> UIC (underground injection of fluids)									
		<input type="checkbox"/> PSD (air emissions)	<input type="checkbox"/> Nonattainment program (CAA)	<input type="checkbox"/> NESHAPs (CAA)									
		<input type="checkbox"/> Ocean dumping (MPRSA)	<input type="checkbox"/> Dredge or fill (CWA Section 404)	<input checked="" type="checkbox"/> Other (specify) See Attachment 1									
SECTION 7. MAP (40 CFR 122.21(f)(7))													
Map	7.1	Have you attached a topographic map containing all required information to this application? (See instructions for specific requirements.) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> CAFO—Not Applicable (See requirements in Form 2B.) (See Attachment 2 for map)											
SECTION 8. NATURE OF BUSINESS (40 CFR 122.21(f)(8))													
Nature of Business	8.1	<p>Describe the nature of your business.</p> <p>The Benning Service Center (Facility) occupies 77 acres in the northeast of the District of Columbia. The Facility was formerly comprised of an electric generating station and a major service center. The generating station was shut down in June 2010 and underwent demolition in September 2014. The service center supports PEPCO's operation of its electric transmission and distribution system and houses three electric substations.</p> <p>Note- this is not a Treatment, Storage, and Disposal Facility (TSDF).</p> <p>See Attachment 3 - Site Map</p>											
SECTION 9. COOLING WATER INTAKE STRUCTURES (40 CFR 122.21(f)(9))													
Cooling Water Intake Structures	9.1	Does your facility use cooling water? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 10.1.											
	9.2	Identify the source of cooling water. (Note that facilities that use a cooling water intake structure as described at 40 CFR 125, Subparts I and J may have additional application requirements at 40 CFR 122.21(r). Consult with your NPDES permitting authority to determine what specific information needs to be submitted and when.)											
SECTION 10. VARIANCE REQUESTS (40 CFR 122.21(f)(10))													
Variance Requests	10.1	<p>Do you intend to request or renew one or more of the variances authorized at 40 CFR 122.21(m)? (Check all that apply. Consult with your NPDES permitting authority to determine what information needs to be submitted and when.)</p> <table border="0"> <tr> <td><input type="checkbox"/> Fundamentally different factors (CWA Section 301(n))</td> <td><input type="checkbox"/> Water quality related effluent limitations (CWA Section 302(b)(2))</td> </tr> <tr> <td><input type="checkbox"/> Non-conventional pollutants (CWA Section 301(c) and (g))</td> <td><input type="checkbox"/> Thermal discharges (CWA Section 316(a))</td> </tr> <tr> <td colspan="2"><input checked="" type="checkbox"/> Not applicable</td> </tr> </table>						<input type="checkbox"/> Fundamentally different factors (CWA Section 301(n))	<input type="checkbox"/> Water quality related effluent limitations (CWA Section 302(b)(2))	<input type="checkbox"/> Non-conventional pollutants (CWA Section 301(c) and (g))	<input type="checkbox"/> Thermal discharges (CWA Section 316(a))	<input checked="" type="checkbox"/> Not applicable	
<input type="checkbox"/> Fundamentally different factors (CWA Section 301(n))	<input type="checkbox"/> Water quality related effluent limitations (CWA Section 302(b)(2))												
<input type="checkbox"/> Non-conventional pollutants (CWA Section 301(c) and (g))	<input type="checkbox"/> Thermal discharges (CWA Section 316(a))												
<input checked="" type="checkbox"/> Not applicable													

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SECTION 11. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))

Checklist and Certification Statement	11.1	In Column 1 below, mark the sections of Form 1 that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to provide attachments.	
		Column 1	Column 2
	<input checked="" type="checkbox"/>	Section 1: Activities Requiring an NPDES Permit	<input type="checkbox"/> w/ attachments
	<input checked="" type="checkbox"/>	Section 2: Name, Mailing Address, and Location	<input type="checkbox"/> w/ attachments
	<input checked="" type="checkbox"/>	Section 3: SIC Codes	<input type="checkbox"/> w/ attachments
	<input checked="" type="checkbox"/>	Section 4: Operator Information	<input type="checkbox"/> w/ attachments
	<input checked="" type="checkbox"/>	Section 5: Indian Land	<input type="checkbox"/> w/ attachments
	<input checked="" type="checkbox"/>	Section 6: Existing Environmental Permits	<input checked="" type="checkbox"/> w/ attachments
	<input checked="" type="checkbox"/>	Section 7: Map	<input checked="" type="checkbox"/> w/ topographic map <input type="checkbox"/> w/ additional attachments
	<input checked="" type="checkbox"/>	Section 8: Nature of Business	<input checked="" type="checkbox"/> w/ attachments
	<input checked="" type="checkbox"/>	Section 9: Cooling Water Intake Structures	<input type="checkbox"/> w/ attachments
	<input checked="" type="checkbox"/>	Section 10: Variance Requests	<input type="checkbox"/> w/ attachments
	<input checked="" type="checkbox"/>	Section 11: Checklist and Certification Statement	<input type="checkbox"/> w/ attachments
	11.2	Certification Statement <i>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</i>	
	Name (print or type first and last name)	Official title	
	MICHAEL S. PONCIA	VP Support Services	
	Signature	Date signed	
		9/9/19	

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Form 2F NPDES		U.S Environmental Protection Agency Application for NPDES Permit to Discharge Wastewater STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY					
SECTION 1. OUTFALL LOCATION (40 CFR 122.21(g)(1))							
Outfall Location	1.1	Provide information on each of the facility's outfalls in the table below					
		Outfall Number	Receiving Water Name	Latitude		Longitude	
		013	Anacostia River	38° 53' 60" N		76° 57' 30" W	
		101	Anacostia River	38° 53' 46" N		76° 57' 36" W	
				° ' "		° ' "	
				° ' "		° ' "	
				° ' "		° ' "	
				° ' "		° ' "	
SECTION 2. IMPROVEMENTS (40 CFR 122.21(g)(6))							
Improvements	2.1	Are you presently required by any federal, state, or local authority to meet an implementation schedule for constructing, upgrading, or operating wastewater treatment equipment or practices or any other environmental programs that could affect the discharges described in this application? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Section 3.					
	2.2	Briefly identify each applicable project in the table below.					
		Brief Identification and Description of Project	Affected Outfalls (list outfall numbers)	Source(s) of Discharge		Final Compliance Dates	
						Required	Projected
		Upgraded stormwater system: removal of accumulated sediment, use of StormFilter(R) and Jellyfish(R) treatment technology (see Attachment 4)	013	Stormwater originating from the facility		ongoing	ongoing
2.3	Have you attached sheets describing any additional water pollution control programs (or other environmental projects that may affect your discharges) that you now have underway or planned? (Optional Item) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						

SECTION 3. SITE DRAINAGE MAP (40 CFR 122.26(c)(1)(i)(A))

Site Drainage Map	3.1	Have you attached a site drainage map containing all required information to this application? (See instructions for specific guidance.) <input checked="" type="checkbox"/> Yes (See Attachment 4 Figures 1 and 2) <input type="checkbox"/> No
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SECTION 4. POLLUTANT SOURCES (40 CFR 122.26(c)(1)(i)(B))

Pollutant Sources	4.1	Provide information on the facility's pollutant sources in the table below.				
		Outfall Number	Impervious Surface Area (within a mile radius of the facility)	<i>specify units</i>	Total Surface Area Drained (within a mile radius of the facility)	<i>specify units</i>
		013	39.94	acres	50.27	acres
		101	3.92	acres	4.38	acres
				<i>specify units</i>		<i>specify units</i>
				<i>specify units</i>		<i>specify units</i>
				<i>specify units</i>		<i>specify units</i>
				<i>specify units</i>		<i>specify units</i>
	4.2	Provide a narrative description of the facility's significant material in the space below. (See instructions for content requirements.)				
		See Attachment 5.				
4.3	Provide the location and a description of existing structural and non-structural control measures to reduce pollutants in stormwater runoff. (See instructions for specific guidance.)					
	Stormwater Treatment					
	Outfall Number	Control Measures and Treatment			Codes from Exhibit 2F-1 (list)	
		See Attachment 4.				

SECTION 5. NON STORMWATER DISCHARGES (40 CFR 122.26(c)(1)(i)(C))

Non-Stormwater Discharges	5.1	<i>I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of non-stormwater discharges. Moreover, I certify that the outfalls identified as having non-stormwater discharges are described in either an accompanying NPDES Form 2C, 2D, or 2E application.</i>		
	Name (print or type first and last name)		Official title	
	Tammy Sanford		Mgr, Env Management	
	Signature		Date signed	
	Tammy Sanford		9-10-2019	
	5.2	Provide the testing information requested in the table below.		
	Outfall Number	Description of Testing Method Used	Date(s) of Testing	Onsite Drainage Points Directly Observed During Test
	013	In-depth assessment of schematics (Attachment 6)		
101	In-depth assessment of schematics (Attachment 6)			

SECTION 6. SIGNIFICANT LEAKS OR SPILLS (40 CFR 122.26(c)(1)(i)(D))

Significant Leaks or Spills	6.1	Describe any significant leaks or spills of toxic or hazardous pollutants in the last three years. There have been no leaks or spills of toxic or hazardous pollutants in the last three years.
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SECTION 7. DISCHARGE INFORMATION (40 CFR 122.26(c)(1)(i)(E))

Discharge Information	See the instructions to determine the pollutants and parameters you are required to monitor and, in turn, the tables you must complete. Not all applicants need to complete each table.	
	7.1	Is this a new source or new discharge? <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Yes → See instructions regarding submission of <i>estimated</i> data. </div> <div> <input checked="" type="checkbox"/> No → See instructions regarding submission of <i>actual</i> data. </div> </div>
	Tables A, B, C, and D	
	7.2	Have you completed Table A for each outfall? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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Discharge Information Continued	7.3	Is the facility subject to an effluent limitation guideline (ELG) or effluent limitations in an NPDES permit for its process wastewater? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 7.5.
	7.4	Have you completed Table B by providing quantitative data for those pollutants that are (1) limited either directly or indirectly in an ELG and/or (2) subject to effluent limitations in an NPDES permit for the facility's process wastewater? <input type="checkbox"/> Yes <input type="checkbox"/> No
	7.5	Do you know or have reason to believe any pollutants in Exhibit 2F-2 are present in the discharge? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 7.7.
	7.6	Have you listed all pollutants in Exhibit 2F-2 that you know or have reason to believe are present in the discharge and provided quantitative data or an explanation for those pollutants in Table C? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	7.7	Do you qualify for a small business exemption under the criteria specified in the Instructions? <input type="checkbox"/> Yes → SKIP to Item 7.18. <input checked="" type="checkbox"/> No
	7.8	Do you know or have reason to believe any pollutants in Exhibit 2F-3 are present in the discharge? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 7.10.
	7.9	Have you listed all pollutants in Exhibit 2F-3 that you know or have reason to believe are present in the discharge in Table C? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	7.10	Do you expect any of the pollutants in Exhibit 2F-3 to be discharged in concentrations of 10 ppb or greater? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 7.12.
	7.11	Have you provided quantitative data in Table C for those pollutants in Exhibit 2F-3 that you expect to be discharged in concentrations of 10 ppb or greater? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	7.12	Do you expect acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6-dinitrophenol to be discharged in concentrations of 100 ppb or greater? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 7.14.
	7.13	Have you provided quantitative data in Table C for the pollutants identified in Item 7.12 that you expect to be discharged in concentrations of 100 ppb or greater? <input type="checkbox"/> Yes <input type="checkbox"/> No
	7.14	Have you provided quantitative data or an explanation in Table C for pollutants you expect to be present in the discharge at concentrations less than 10 ppb (or less than 100 ppb for the pollutants identified in Item 7.12)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	7.15	Do you know or have reason to believe any pollutants in Exhibit 2F-4 are present in the discharge? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 7.17.
	7.16	Have you listed pollutants in Exhibit 2F-4 that you know or believe to be present in the discharge and provided an explanation in Table C? <input type="checkbox"/> Yes <input type="checkbox"/> No
	7.17	Have you provided information for the storm event(s) sampled in Table D? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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Discharge Information Continued	Used or Manufactured Toxics			
	7.18	Is any pollutant listed on Exhibits 2F-2 through 2F-4 a substance or a component of a substance used or manufactured as an intermediate or final product or byproduct? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Section 8.		
	7.19	List the pollutants below, including TCDD if applicable.		
	1.	4.	7.	
	2.	5.	8.	
	3.	6.	9.	

SECTION 8. BIOLOGICAL TOXICITY TESTING DATA (40 CFR 122.21(g)(11))					
Biological Toxicity Testing Data	8.1	Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last three years? <input checked="" type="checkbox"/> Yes Most recent WET testing conducted in September 2013 in support of prior renewal application submitted December 2013. <input type="checkbox"/> No → SKIP to Section 9.			
	8.2	Identify the tests and their purposes below.			
		Test(s)	Purpose of Test(s)	Submitted to NPDES Permitting Authority?	Date Submitted
		Acute whole effluent toxicity	Acute toxicity at Outfall 101	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	09/30/2013
		Acute whole effluent toxicity	Acute toxicity at Outfall 013	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	09/30/2013
		Acute whole effluent toxicity	Upstrm Anacostia R. acute tox	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	09/30/2013

SECTION 9. CONTRACT ANALYSIS INFORMATION (40 CFR 122.21(g)(12))				
Contract Analysis Information	9.1	Were any of the analyses reported in Section 7 (on Tables A through C) performed by a contract laboratory or consulting firm? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Section 10.		
	9.2	Provide information for each contract laboratory or consulting firm below.		
		Laboratory Number 1	Laboratory Number 2	Laboratory Number 3
	Name of laboratory/firm	Microbac Laboratories, Inc.,	EA Engineering, Science, and Technology, Inc. EA Ecotoxicology Laboratory	
	Laboratory address	2101 Van Deman St., Baltimore, MD 21224	231 Schilling Circle, Hunt Valley, MD 21031	
	Phone number	(410) 633-1800	(410) 584-7000	
	Pollutant(s) analyzed	Nitrate/Nitrite, COD, TSS, TKN, TP, BOD, TN, Iron, Copper, Lead, Nickel, Zinc, Cadmium, Oil & grease, PCB-1016, -1221, -1232, -1242, -1248, -1254, -1260	48 hr static acute screening assay (EPA-821-R-02-012)	

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SECTION 10. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))

Checklist and Certification Statement	10.1	<p>In Column 1 below, mark the sections of Form 2F that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to complete all sections or provide attachments.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%; text-align: center;">Column 1</th> <th style="width: 65%; text-align: center;">Column 2</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/> Section 1</td> <td><input type="checkbox"/> w/ attachments (e.g., responses for additional outfalls)</td> </tr> <tr> <td><input checked="" type="checkbox"/> Section 2</td> <td><input checked="" type="checkbox"/> w/ attachments</td> </tr> <tr> <td><input checked="" type="checkbox"/> Section 3</td> <td><input checked="" type="checkbox"/> w/ site drainage map</td> </tr> <tr> <td><input checked="" type="checkbox"/> Section 4</td> <td><input checked="" type="checkbox"/> w/ attachments</td> </tr> <tr> <td><input checked="" type="checkbox"/> Section 5</td> <td><input checked="" type="checkbox"/> w/ attachments</td> </tr> <tr> <td><input checked="" type="checkbox"/> Section 6</td> <td><input type="checkbox"/> w/ attachments</td> </tr> <tr> <td><input checked="" type="checkbox"/> Section 7</td> <td> <div style="display: flex; justify-content: space-between;"> <div> <input checked="" type="checkbox"/> Table A <input type="checkbox"/> Table B <input checked="" type="checkbox"/> Table C </div> <div> <input type="checkbox"/> w/ small business exemption request <input type="checkbox"/> w/ analytical results as an attachment <input checked="" type="checkbox"/> Table D </div> </div> </td> </tr> <tr> <td><input checked="" type="checkbox"/> Section 8</td> <td><input type="checkbox"/> w/attachments</td> </tr> <tr> <td><input checked="" type="checkbox"/> Section 9</td> <td><input type="checkbox"/> w/attachments (e.g., responses for additional contact laboratories or firms)</td> </tr> <tr> <td><input checked="" type="checkbox"/> Section 10</td> <td><input type="checkbox"/></td> </tr> </tbody> </table>	Column 1	Column 2	<input checked="" type="checkbox"/> Section 1	<input type="checkbox"/> w/ attachments (e.g., responses for additional outfalls)	<input checked="" type="checkbox"/> Section 2	<input checked="" type="checkbox"/> w/ attachments	<input checked="" type="checkbox"/> Section 3	<input checked="" type="checkbox"/> w/ site drainage map	<input checked="" type="checkbox"/> Section 4	<input checked="" type="checkbox"/> w/ attachments	<input checked="" type="checkbox"/> Section 5	<input checked="" type="checkbox"/> w/ attachments	<input checked="" type="checkbox"/> Section 6	<input type="checkbox"/> w/ attachments	<input checked="" type="checkbox"/> Section 7	<div style="display: flex; justify-content: space-between;"> <div> <input checked="" type="checkbox"/> Table A <input type="checkbox"/> Table B <input checked="" type="checkbox"/> Table C </div> <div> <input type="checkbox"/> w/ small business exemption request <input type="checkbox"/> w/ analytical results as an attachment <input checked="" type="checkbox"/> Table D </div> </div>	<input checked="" type="checkbox"/> Section 8	<input type="checkbox"/> w/attachments	<input checked="" type="checkbox"/> Section 9	<input type="checkbox"/> w/attachments (e.g., responses for additional contact laboratories or firms)	<input checked="" type="checkbox"/> Section 10	<input type="checkbox"/>
	Column 1	Column 2																						
	<input checked="" type="checkbox"/> Section 1	<input type="checkbox"/> w/ attachments (e.g., responses for additional outfalls)																						
	<input checked="" type="checkbox"/> Section 2	<input checked="" type="checkbox"/> w/ attachments																						
	<input checked="" type="checkbox"/> Section 3	<input checked="" type="checkbox"/> w/ site drainage map																						
	<input checked="" type="checkbox"/> Section 4	<input checked="" type="checkbox"/> w/ attachments																						
	<input checked="" type="checkbox"/> Section 5	<input checked="" type="checkbox"/> w/ attachments																						
	<input checked="" type="checkbox"/> Section 6	<input type="checkbox"/> w/ attachments																						
	<input checked="" type="checkbox"/> Section 7	<div style="display: flex; justify-content: space-between;"> <div> <input checked="" type="checkbox"/> Table A <input type="checkbox"/> Table B <input checked="" type="checkbox"/> Table C </div> <div> <input type="checkbox"/> w/ small business exemption request <input type="checkbox"/> w/ analytical results as an attachment <input checked="" type="checkbox"/> Table D </div> </div>																						
	<input checked="" type="checkbox"/> Section 8	<input type="checkbox"/> w/attachments																						
	<input checked="" type="checkbox"/> Section 9	<input type="checkbox"/> w/attachments (e.g., responses for additional contact laboratories or firms)																						
	<input checked="" type="checkbox"/> Section 10	<input type="checkbox"/>																						
	10.2	<p>Certification Statement</p> <p><i>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Name (print or type first and last name)</td> <td style="width: 50%;">Official title</td> </tr> <tr> <td>MICHAEL S. PORCIA</td> <td>VP Support Services</td> </tr> <tr> <td>Signature</td> <td>Date signed</td> </tr> <tr> <td></td> <td>9/9/19</td> </tr> </table>	Name (print or type first and last name)	Official title	MICHAEL S. PORCIA	VP Support Services	Signature	Date signed		9/9/19														
	Name (print or type first and last name)	Official title																						
MICHAEL S. PORCIA	VP Support Services																							
Signature	Date signed																							
	9/9/19																							

EPA Identification Number DC0000094	NPDES Permit Number DC0000094	Facility Name Benning Service Center	Outfall Number 013
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Form Approved 03/05/19
OMB No. 2040-0004

TABLE A. CONVENTIONAL AND NON CONVENTIONAL PARAMETERS (40 CFR 122.26(c)(1)(i)(E)(3))¹

You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details and requirements.

Pollutant or Parameter		Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
		Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite**	Grab Sample Taken During First 30 Minutes*	Flow-Weighted Composite**		
1.	Oil and grease	<5.78 mg/L		2.83 mg/L		4	
2.	Biochemical oxygen demand (BOD ₅)	45 mg/L†	8.5 mg/L	45 mg/L†	8.5 mg/L	1	
3.	Chemical oxygen demand (COD)	96 mg/L†	<50 mg/L	96 mg/L†	<50 mg/L	1	
4.	Total suspended solids (TSS)	41 mg/L	54 mg/L	29.28 mg/L	54 mg/L	5	
5.	Total phosphorus	0.23 mg/L†	0.13 mg/L	0.23 mg/L†	0.13 mg/L	1	
6.	Total Kjeldahl nitrogen (TKN)	3.36 mg/L†	1.96 mg/L	3.36 mg/L†	1.96 mg/L	1	
7.	Total nitrogen (as N)	4.02 mg/L†	2.42 mg/L	4.02 mg/L†	2.42 mg/L	1	
8.	pH (minimum)	7.34 s.u.		7.61 s.u.		4	
	pH (maximum)	8.23 s.u.		7.61 s.u.		4	

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

† Only one value recorded within last year

* 1/2 detection limit used for non-detected results in average calculations

** Flow-weighted composite samples only collected once

EPA Identification Number DC0000094	NPDES Permit Number DC0000094	Facility Name Benning Service Center	Outfall Number 013
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Form Approved 03/05/19
OMB No. 2040-0004

TABLE C. TOXIC POLLUTANTS, CERTAIN HAZARDOUS SUBSTANCES, AND ASBESTOS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(B) and (vii))¹

List each pollutant shown in Exhibits 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite**	Grab Sample Taken During First 30 Minutes*	Flow-Weighted Composite**		
Cadmium	0.25 ug/L	<0.25 ug/L	0.15 ug/L	<0.25 ug/L	5	
Copper	13.4 ug/L	17.3 ug/L	6.625 ug/L	17.3 ug/L	6	
Iron	0.94mg/L	0.74 mg/L	0.435 mg/L	0.74 mg/L	6	
Lead	12.6 ug/L	12.0 ug/L	5.54 ug/L	12.0 ug/L	5	
Nickel	4.6 ug/L	4.0 ug/L	2.84 ug/L	4.0 ug/L	5	
Zinc	97.4 ug/L	74.1 ug/L	43.1 ug/L	74.1 ug/L	6	

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

* 1/2 detection limit used for non-detected results in average calculations

**Flow-weighted composite samples only collected once

EPA Identification Number DC0000094	NPDES Permit Number DC0000094	Facility name Benning Service Center	Outfall Number 013
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Form Approved 03/05/19
OMB No. 2040-0004

TABLE D. STORM EVENT INFORMATION (40 CFR 122.26(c)(1)(i)(E)(6))

Provide data for the storm event(s) that resulted in the maximum daily discharges for the flow-weighted composite sample.

Date of Storm Event	Duration of Storm Event (in hours)	Total Rainfall During Storm Event (in inches)	Number of Hours Between Beginning of Storm Measured and End of Previous Measurable Rain Event	Maximum Flow Rate During Rain Event (in gpm or specify units)	Total Flow from Rain Event (in gallons or specify units)
06/17/2019	8	0.99	89	1365 gpm	1,965,570 gallons

Provide a description of the method of flow measurement or estimate.

Three composite samples were collected throughout the evening as grabs. Approximately 5 quarts were collected for each grab and then composited.

Flow measurements were calculated using the rational equation of $Q=ciA$:

Where,

Q = Peak discharge, cfs

c = Rational method runoff coefficient

i = Rainfall intensity, inch/hour

A = Drainage area, acre

Rainfall was determine using an on-site rain gage.

EPA Identification Number DC0000094	NPDES Permit Number DC0000094	Facility Name Benning Service Center	Outfall Number 101
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Form Approved 03/05/19
OMB No. 2040-0004

TABLE A. CONVENTIONAL AND NON CONVENTIONAL PARAMETERS (40 CFR 122.26(c)(1)(i)(E)(3))¹

You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details and requirements.

Pollutant or Parameter		Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
		Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite**	Grab Sample Taken During First 30 Minutes*	Flow-Weighted Composite**		
1.	Oil and grease	<5.66 mg/L		2.69 mg/L		4	
2.	Biochemical oxygen demand (BOD ₅)	46 mg/L†	8.7 mg/L	45 mg/L†	8.7 mg/L	1	
3.	Chemical oxygen demand (COD)	<50 mg/L†	<50 mg/L	<50 mg/L†	<50 mg/L	1	
4.	Total suspended solids (TSS)	250 mg/L	26 mg/L	117 mg/L	26 mg/L	4	
5.	Total phosphorus	0.16 mg/L†	0.17 mg/L	0.16 mg/L†	0.17 g/L	1	
6.	Total Kjeldahl nitrogen (TKN)	2.52 mg/L†	2.52 mg/L	2.52 mg/L†	2.52 mg/L	1	
7.	Total nitrogen (as N)	3.13 mg/L†	3.12 mg/L	3.13 mg/L†	3.12 mg/L	1	
8.	pH (minimum)	7.19 s.u.		7.40 s.u.		4	
	pH (maximum)	7.80 s.u.		7.40 s.u.		4	

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

† Only one value recorded within last year

* 1/2 detection limit used for non-detected results in average calculations

** Flow-weighted composite samples only collected once

EPA Identification Number DC0000094	NPDES Permit Number DC0000094	Facility Name Benning Service Center	Outfall Number 101
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Form Approved 03/05/19
OMB No. 2040-0004

TABLE C. TOXIC POLLUTANTS, CERTAIN HAZARDOUS SUBSTANCES, AND ASBESTOS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(B) and (vii))¹

List each pollutant shown in Exhibits 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite**	Grab Sample Taken During First 30 Minutes *	Flow-Weighted Composite**		
Cadmium	0.723 ug/L	<0.25 ug/L	0.487 ug/L	<0.25 ug/L	4	
Copper	116 ug/L	35.8 ug/L	64.7 ug/L	35.8 ug/L	4	
Iron	7 mg/L	1.7 mg/L	3.5 mg/L	1.7 mg/L	4	
Lead	117 ug/L	23.2 ug/L	62.4 ug/L	23.2 ug/L	4	
Nickel	118 ug/L	26.6 ug/L	57.0 ug/L	26.6 ug/L	4	
Zinc	293 ug/L	74.3 ug/L	158 ug/L	74.3 ug/L	4	

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

* 1/2 detection limit used for non-detected results in average calculations

**Flow-weighted composite samples only collected once

EPA Form 3510-2F (Revised 3-19)

EPA Identification Number DC0000094	NPDES Permit Number DC0000094	Facility name Benning Service Center	Outfall Number 101
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Form Approved 03/05/19
OMB No. 2040-0004

TABLE D. STORM EVENT INFORMATION (40 CFR 122.26(c)(1)(i)(E)(6))

Provide data for the storm event(s) that resulted in the maximum daily discharges for the flow-weighted composite sample.

Date of Storm Event	Duration of Storm Event (in hours)	Total Rainfall During Storm Event (in inches)	Number of Hours Between Beginning of Storm Measured and End of Previous Measurable Rain Event	Maximum Flow Rate During Rain Event (in gpm or specify units)	Total Flow from Rain Event (in gallons or specify units)
06/17/2019	8	0.99	89	242 gpm	349,017 gallons

Provide a description of the method of flow measurement or estimate.

Three composite samples were collected throughout the evening as grabs. Approximately 5 quarts were collected for each grab and then composited.

Since samples from Outfall 101 Manhole K cannot be collected directly, all samples (grabs and composites) are the combination of 4 individual grabs collected from inlets 87, 88, 90, and 91. These four individual grabs are composited into one grab sample as approved by Ms. Mary Letzkus, formerly of USEPA Region III, via phone conversation and email in March 2014.

Flow measurements were calculated using the rational equation of $Q=ciA$:

Where,

Q = Peak discharge, cfs

c = Rational method runoff coefficient

i = Rainfall intensity, inch/hour

A = Drainage area, acre

Rainfall was determine using an on-site rain gage.

EPA ID Number - DC0000094

Attachment 1 - Response to Section 6.1 of Form 1

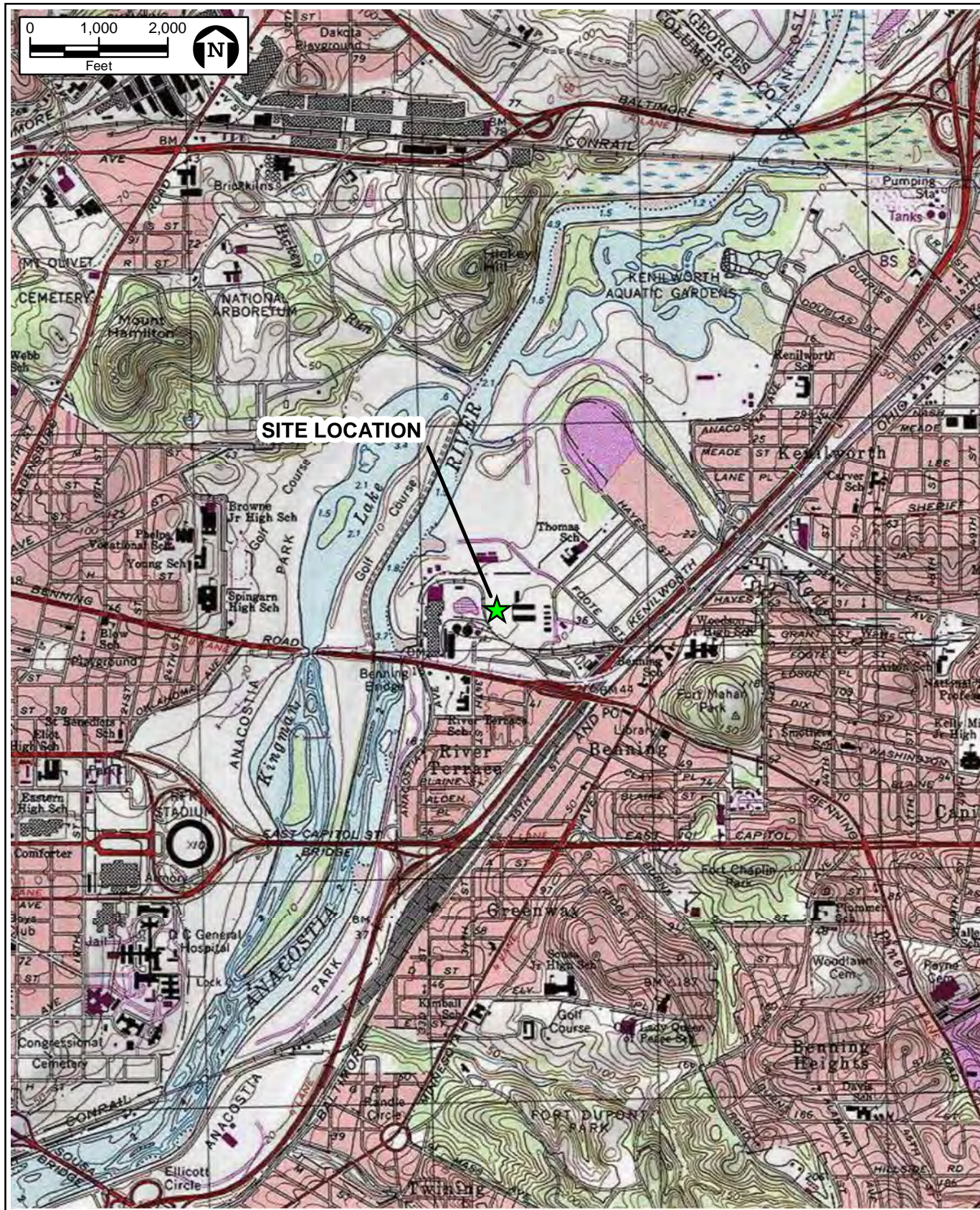
Other Environmental Permits

Air Permit# 026-R1

Oil Operations Permit - 2009-OPV-3141A

Temporary Discharge Authorization Permit - 0312-882

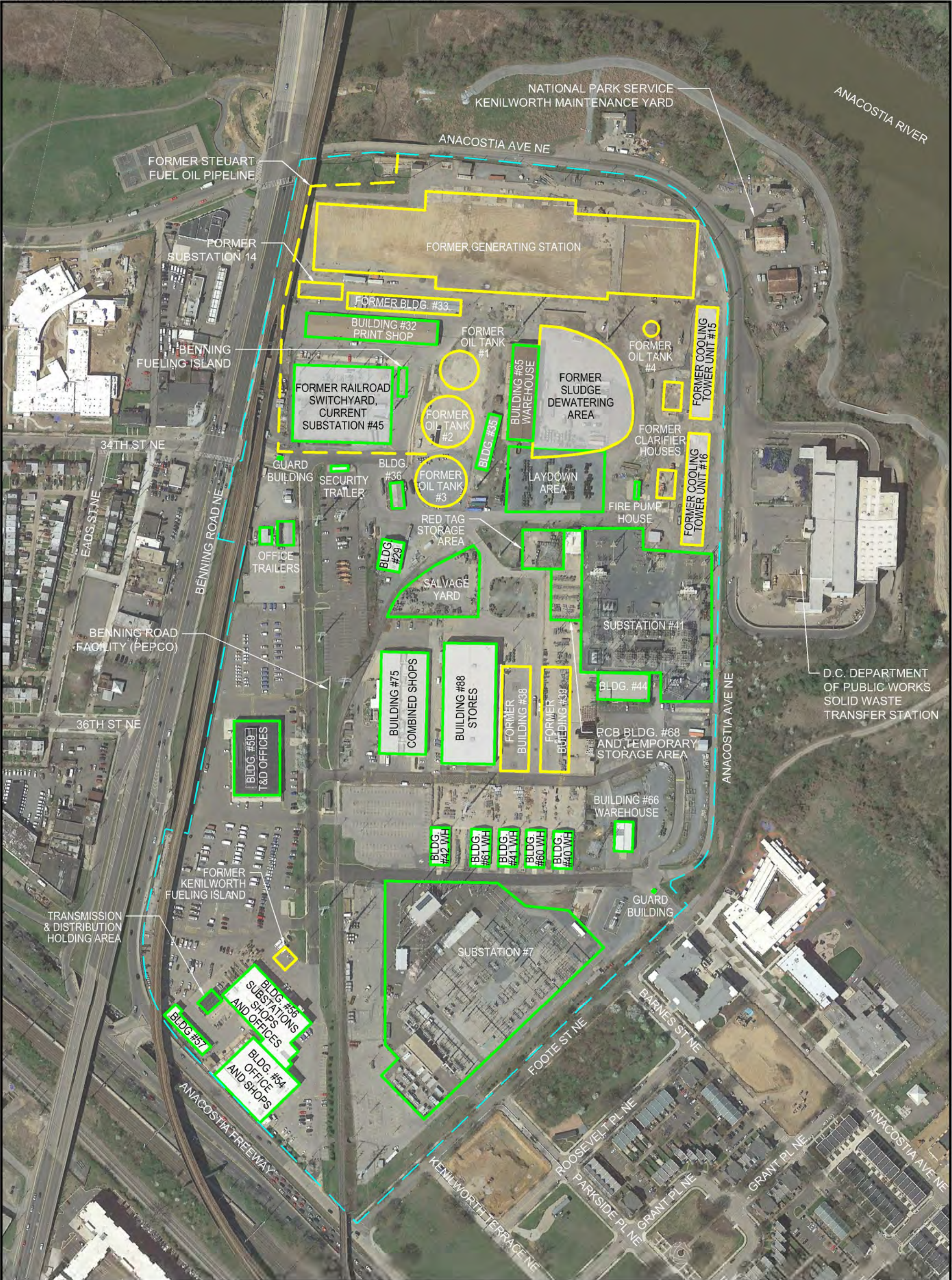
Waste Hauler Permit - WH41



ATTACHMENT 2.
LOCATION MAP
BENNING ROAD FACILITY
3400 BENNING ROAD, NE
WASHINGTON, DC 20019

Sources: USGS, Washington East Quad, 1992; ECT, 2019.

ECT Environmental
Consulting &
Technology, Inc.



LEGEND:

CURRENT BUILDING, STRUCTURE, OR AREA

FORMER BUILDING, STRUCTURE, OR AREA

PROPERTY BOUNDARY

0125250500

SCALE IN FEET

Attachment 4 - Response to Sections 2.2, 3.1, and 4.3 of Form 2F

STRUCTURAL CONTROLS (for Outfall 013)

Code

- | | |
|---|------------|
| 1. Secondary Containment - Oil filled electrical equipment is provided with secondary containment (concrete dikes or berms) or surrounded by oil absorbent booms in order to prevent the discharge of any leak, spill, or overfill into the storm drains. | 1-X |
| 2. Water Quality Structures - Three water quality structures are located on the Facility and identified as “WQ” on the Benning Site Drainage Area Map (Figures 1 and 2). The locations of these structures are as follows: | 1-U
4-A |

<u>Location of Water Quality Structures</u>	<u>Discharge Point</u>
Adjacent to Substation 7 and Foote Street	015
On the parking lot, South of Substation 7	403
Adjacent to Monitoring Point (MP) 201	MP 201

The water quality structures are designed to remove debris and sediment from the stormwater by gravity separation. The structures are inspected and cleaned of sediment build-up twice a year.

- | | |
|---|-------------------|
| 3. Underground Sedimentation Filtration Vault - This vault (also identified as WQ on the Benning Drainage Area Map) was installed in the employee parking lot (south of Storage Building 42) in March 2011 as part of the upgrades to the stormwater drainage system at the Gas Insulating Switchyard (GIS) inside Substation 7. There are 18 cartridges inside the vault to filter and remove suspended solids and sediment from stormwater originating from the GIS. The filtered water flows to the 54-inch storm drainpipe. | 1-U
1-Q
4-A |
| 4. Oil/Water Separators - Two oil/water separators (OWS) are located at the Benning Service Center. | 1-U
2-A |

One OWS is located ahead of MP 003 and is used to remove oil and grease and solids from stormwater which is pumped from Pepco’s utility manholes within the District of Columbia and transported to the facility. The water from the OWS passes through carbon filters prior to MP 003 and eventually discharges through outfall 013 after testing for compliance with permit limits. This OWS operates in batch mode approximately once per month. Each discharge last for approximately 2 hours with a total flow of approximately 4,500 gallons. All discharges from MP 003 are comprised of stormwater only.

The second OWS is located ahead of MP 201 and is currently receives yard drainage which flows to the lift station prior to being pumped to the oil/water separator. Flow from the oil/water separator is discharged via Outfall 013.

- | | |
|---|-------------------|
| 5. Stormwater Treatment – In accordance with the 2017 Consent Decree, areas of potential concern, or “hot spots”, were identified, and a stormwater treatment system was designed to address these areas. | 1-Q
2-A
2-B |
|---|-------------------|

Stormwater treatment systems have been installed at the following identified hot spots: transformer test shop, salvage yard, former fuel tank area, and former power plant area. These treatment systems use a combination of Contech® DownSpout StormFilter™, Jellyfish® Filter, and StormFilter® stormwater treatment systems, as described further below. Both the Downspout StormFilter™ and StormFilter® units utilize a blended media of Zeolite A, which targets metals removal, and granular activated carbon (GAC), which was shown to provide a greater absorption capacity at the relatively low contaminant loadings observed at Outfall 013.

DownSpout StormFilters™ were installed at the existing loading dock roof downspouts on the west face of Building #56 to provide filtration for roof runoff determined to have high concentrations of dissolved metals. This treatment is a passive, aboveground pretreatment that utilizes StormFilter® cartridges.

All new inlets and manholes that were installed as part of the treatment system upgrade are equipped with Jellyfish® Filters to collect and/or treat stormwater runoff from surface areas that are predominately impervious, in both in-line and offline configurations, in order to remove total suspended solids (TSS), oil and grease, and floatable trash. This treatment measure is an underground, pretreatment system that utilized membrane filtration cartridges.

StormFilter® stormwater treatment devices were installed as large underground concrete vaults that house a large number of rechargeable, self-cleaning, media-filled cartridges that trap particulates and absorb pollutants such as dissolved metals, hydrocarbons, nutrients, metals and other stormwater related pollutants. StormFilter® cartridges have been customized at each location to target site-specific pollutants.

NONSTRUCTURAL CONTROLS (for Outfalls 013 and 101)

1. **Low Impact Development (LID) Projects** - Three LID projects have been constructed at the Benning Service Center, identified as 4a, 4b and LID project 3 on the Drainage Area Map. The purpose of these projects is to capture stormwater runoff along the heavily trafficked main access road and the employee parking lot. These locations were identified as having the highest potential for capturing polluted runoff from vehicle traffic. The first LID (4a), built in December 2002, is an infiltration swale and drains a parking lot area of approximately 0.3 acre. The second LID (4b), built in October 2004, is a rain

garden and drains a yard area of approximately 0.09 acre. The third LID (Project 3) built in 2007, is a linear bioretention system upgradient of the rain garden in the same drainage area. The Benning Stormwater Pollution Prevention Plan provides a maintenance schedule for the LID.

2. **Stormwater Retention Basins** – Pepco installed stormwater retention basins within the footprints of the former concrete cooling tower basins to capture and infiltrate stormwater.
3. **Total Maximum Daily Load (TMDL) Implementation Plan** - As part of the TMDL implementation Plan, developed in accordance with the facility's NPDES permit requirements and approved by EPA in July 2010, additional control measures to reduce stormwater contamination have been implemented as follows:

a. Phase I - Storm Drain Inlet Maintenance:

- Metal absorbing inlet guards have been installed at all storm drain inlets throughout the facility, except for six inlets where the configuration or design did not permit the placement of inlet guards.
- Heavy duty inlet guards have been placed at areas where there are heavy traffics.
- Oil absorbing booms are in place around most inlets, except in heavy traffic areas where it would be impractical to install them.
- Inspections are conducted after heavy storms to ensure the control measures applied at the storm inlets remain intact.

b. Phase II - Metal Management:

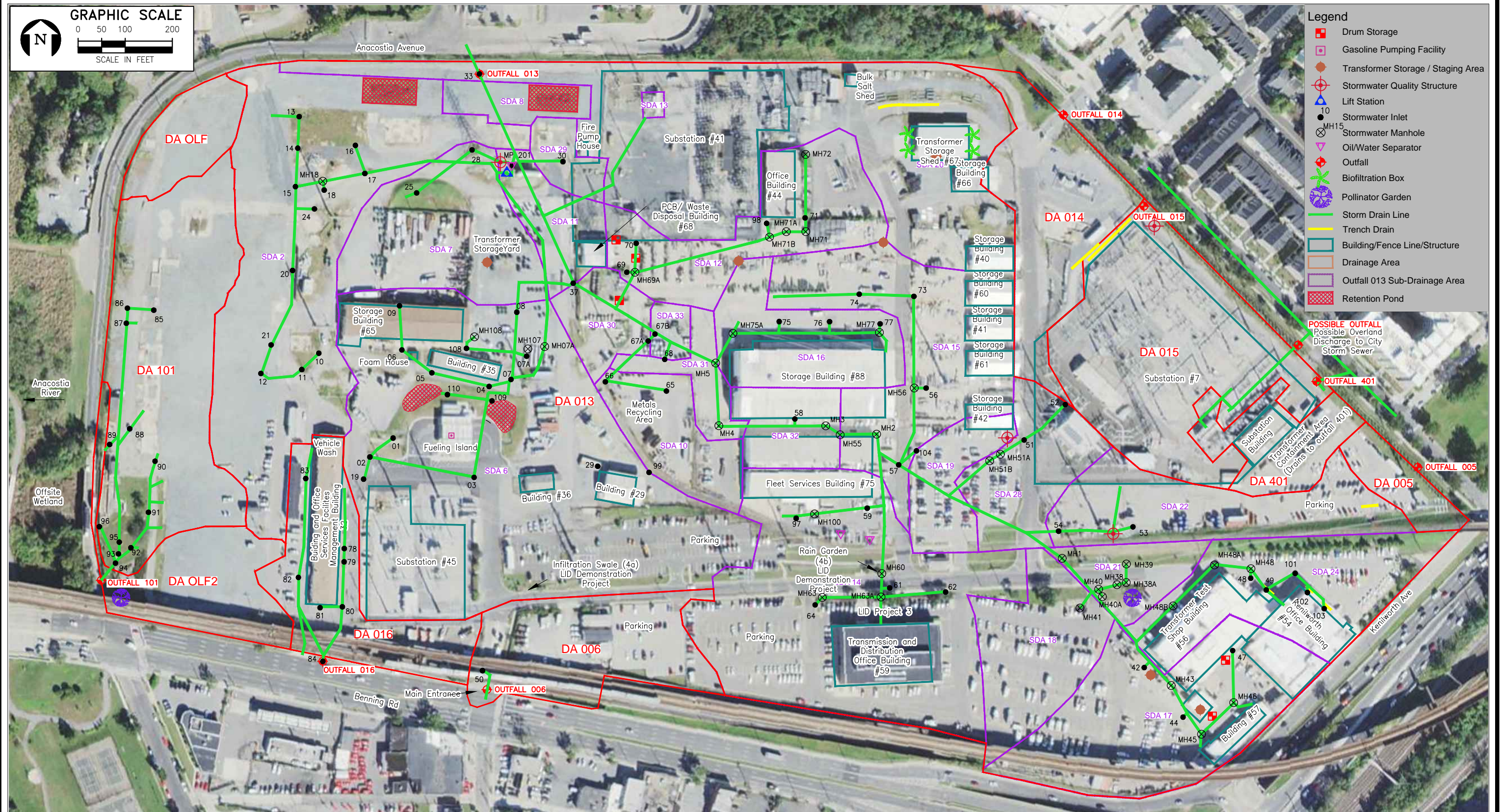
- Store metal in areas exposed to the weather has been either removed from the site or covered up for protection from rainfall.

Monthly inspections are conducted throughout the site as part of the facility's stormwater pollution prevention plan (SWP3) to minimize potential sources of metals in stormwater discharges from the facility.

c. Phase III – Additional BMPs

- Closed-circuit television (CCTV) inspections are conducted annually to assess the condition of the site storm drain system. Accumulated sediments are removed from the storm drains on a periodic basis as needed.
- Loadings within stormwater system have been identified and quantified
- Defects observed during CCTV inspections are repaired and/or replaced as needed.

1-Q



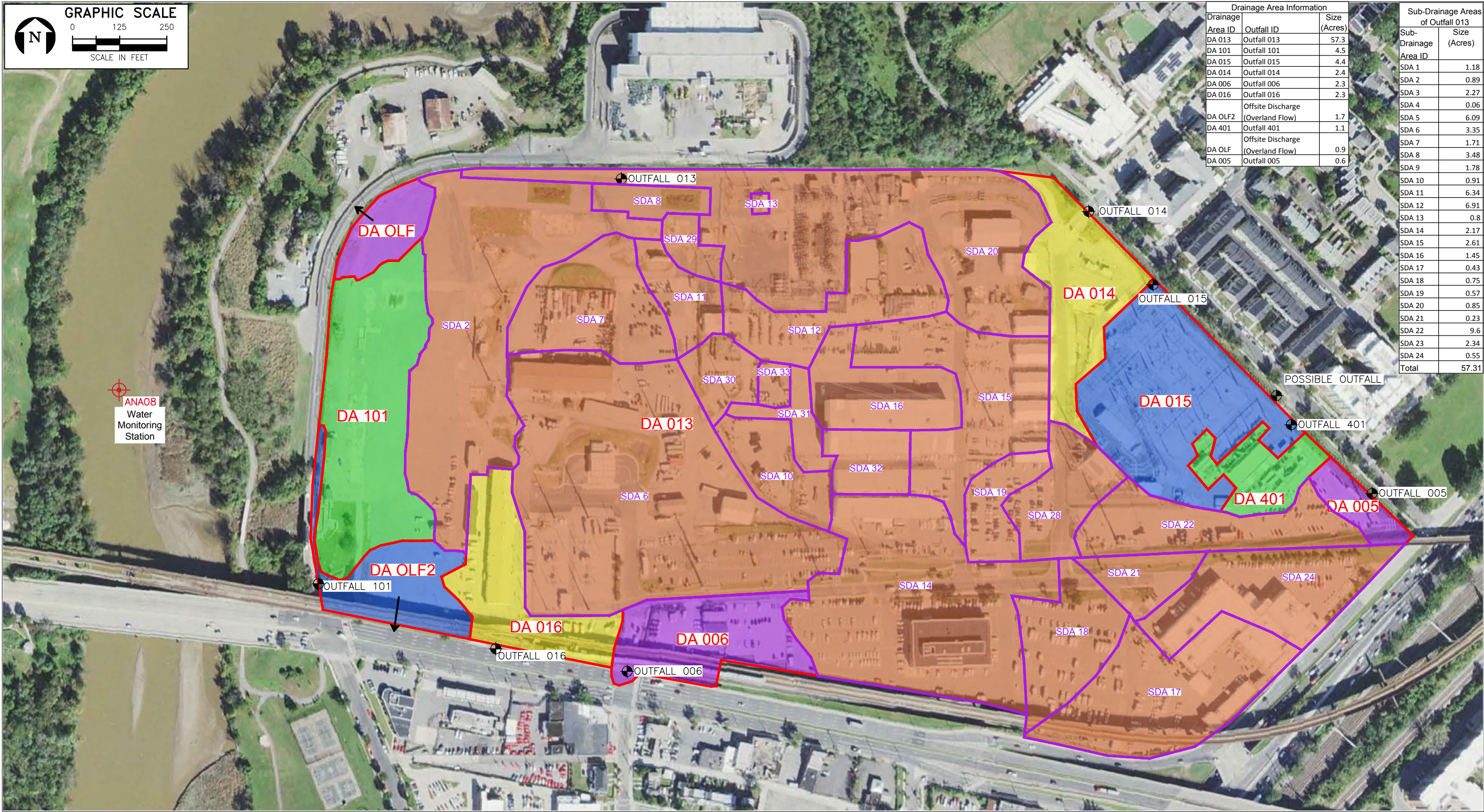


FIGURE 2.
DRAINAGE AREAS
BENNING SERVICE CENTER
POTOMAC ELECTRIC POWER COMPANY, INC.
WASHINGTON, DC
Sources: MD iMAP (Aerial), 2019; Wood, 2018; ECT, 2019.

Attachment 5 - Response to Section 4.2 of Form 2F

Oil Storage Area

- Used Oil - Used oil is stored in a 500-gallon used oil tank located outside Building 75. The tank has built-in secondary containment.
- Mineral Transformer Oil - Transformer oil is stored in four (4) aboveground tanks. The tanks are located under a canopy structure within a diked area. The concrete diked area can hold 140% of the volume of one tank.
- Miscellaneous used oil drums and oily debris – used oil drums (55 gallons) are staged near the transformer shop when generated and prior to being moved to a storage area prior to disposal.

Chemical Storage Area

- There are no bulk chemical storage areas at the Benning Service Center. Chemicals (Ammonia and Sulfuric Acid) were formerly stored in the power plant area and were removed and disposed of off-site prior to demolition of the power plant.

Waste Storage Area

- Building 68 - This building is used for temporary storage of PCB materials and hazardous waste prior to disposal off-site. The floor is concrete and has an epoxy coating that is impervious to any oil or chemical spills. There is containment curbing around the interior perimeter. There are no floor drains within the building that connect to the facility's storm drain system. An internal drainpipe is connected to a 2,000-gallon fiberglass underground tank equipped with manhole access for pumping and off-site disposal.

Oil Filled Electrical Equipment Storage Area

- Outside of Building 56 - New and off-line electrical equipment is temporarily stored outside, pending removal to the Transformer Test Shop. Oil absorbent booms are in place around this equipment. Off-line transformers with unknown PCB content are temporarily stored in a concrete berm area which is covered by a canopy.
- Outside storage areas - Stores Department areas in the vicinity of Buildings 44, 88, 40, 60, 41, 61, 42, 66 and the Stores salvage yard are used for storage of new and off-line transformers, capacitors and various electrical equipment. This equipment contains non-PCB oil.
- A covered storage shed constructed in December 2016 is used for temporary storage of off-line and removed from service transformers and other electrical equipment while awaiting recycling or disposal. Shed is equipped with berms to contain any spills or releases.

Attachment 6 - Response to Section 5.2 of Form 2F

The following table summarizes the drainage areas, and internal and external outfalls displayed on Figure 1 of Attachment 4.

Outfall Number	Operations Contributing Flow
	Operation
013	Stormwater flow (see a through s below) is discharged to Anacostia River via a 54-inch storm drainpipe:
	a. Internal discharge point 420 - runoff from yard drains and roadways (sub- drainage area [SDA] 11) plus flow from three discharges points 201, 204 and 703:
	1. Internal MP 201- water from oil/water separator which consist of stormwater runoff from SDA 2 and SDA 6 and yard drains
	2. Internal discharge point 204 - stormwater overflow from lift station when influent exceeds 500 gpm
	3. Internal discharge point 703 - runoff from sediment pond to water quality structure (SDA 7)
	b. Internal discharge point 206 - runoff from gravel area (SDA 8)
	c. Internal discharge point 402- runoff from parking areas, Building 57, south sides of buildings 54 and 56 (SDA 17).
	d. Internal discharge point 403 - runoff from roadway (SDA 22) to water quality structure
	e. Internal discharge point 404 - runoff from parking areas and roadway on the southeast corner of property (SDAs 18 and 21)
	f. Internal discharge point 405 - runoff from parking areas on the north sides of Buildings 54 and 56 (SDA 24)
	g. Internal discharge point 406- water from an oil water separator which consists of stormwater removed from utility manholes with in the District of Columbia and transported to the Benning Service Center (MP 003), runoff from parking areas, Building 59, south side of Building 75 and internal roadways (SDA 14)
	h. Internal discharge point 407 - runoff from parking areas and roadway east of storage building 42 (SDA 28)
	i. Internal discharge point 408- runoff from storage yard, Buildings 60, 41 and 61, north side of Building 42, southeast side of Building 88, and northeast side of Building 75 and internal roadways (SDA 15)
	j. Internal discharge point 409 - runoff from loading area on the north side of Building 88 (SDA 16)
	k. Internal discharge point 413 - runoff from yard areas, internal roadways and east side of Fire Pump House (SDA 29)
	l. Internal discharge point 414 - runoff from Substation 41, Transformer Storage Shed 67, Storage Building 66, and bulk salt shed (SDA 20) and transformer spill containment pits (SDA 13)
	m. Internal discharge point 415- runoff from yard area (SDA 30)
	n. Internal discharge point 416 - runoff from parking areas, material stockyard, Building 44 and internal roads (SDA 12)
	o. Internal discharge point 417 - runoff from salvage yard and internal roadways (SDAs 10 and 33)

Outfall Number	Operations Contributing Flow
	Operation
013	p. Internal discharge point 418 - runoff from parking area (SDA 19)
	q. Internal discharge point 419 - runoff from internal roads west of building 88 (SDA 31)
	r. Internal discharge point 425 - Runoff from internal road between north side of Building 75 and south side of Building 88 (SDA 32)
	s. Internal discharge 010 - No discharge from the Drying Pit since the drainpipe is capped and locked.
101	<p>Runoff from southwest corner of the property including interior roadways, landscaping and gravel area of former generating station (drainage area [DA] 101 and DA OLF2).</p> <p>Note: Recent CCTV video inspections have raised some questions about the accuracy of the current system map with respect to Outfall 101. Pepco will be conducting a further investigation of the Outfall 101 drainage system and will provide an updated drainage map as warranted by the results of that further investigation.</p>

since the permit was last renewed include the main smoke stacks, several large above-ground fuel storage tanks, two fuel oil pump houses, and several large station transformers.

The nature of the effluent discharges from the Benning facility has also changed significantly since the last NPDES permit renewal. The process water discharges at the site have ceased as a result of the generating station shutdown and removal. The following table summarizes the current status of each of the separate discharges authorized by the existing permit.

Discharge Point	Effluent Source	Status
Outfall 003 (internal discharge to Outfall 013)	Oil/water separator associated with off-site stormwater from underground vaults.	To be eliminated.
Outfall 013	Stormwater collected in drop inlets connected to main underground storm drain.	Active
Outfall 101 (Monitoring Location at Manhole K)	Stormwater collected in drop inlets on the west side of the Benning facility connected to a separate underground storm drain system.	Active
Outfall 201 (internal discharge to Outfall 013)	Stormwater from former power plant area, demineralized wash water, discharge associated with former ash settling tank, former tank drainage areas, and hydrostatic test water and wash water.	Eliminated, except for stormwater collected in drop inlets near the former power plant which flows through the oil/water separator and then to Outfall 013.
Outfalls 202 and 203 (internal discharges to Outfall 013)	Cooling tower blowdown and cooling tower basin wash water.	Eliminated

As shown in the foregoing table, the only remaining discharges from the facility to surface water consist of (i) stormwater collected in inlets connected to underground storm drain systems and (ii) stormwater removed from offsite vaults which is transported to the Benning facility in tanker trucks for treatment in an oil/water separator prior to discharge via outfall 013. Upon reissuance of the permit, Pepco currently intends to discontinue the discharge of stormwater from off-site underground vaults. In addition, Pepco believes that the renewed permit should no longer require monitoring at Outfall 201 because, as explained in the foregoing table, the effluent from

this internal monitoring point now consist solely of stormwater which is also monitored at Outfall 013. Thus, the only effluent for which authorization will be required under the renewed permit is stormwater collected in the underground storm drain systems that discharge to the Anacostia River via Outfalls 013 and 101.²

When the current NPDES permit was issued for the Benning facility in 2009, the facility was subject to industrial stormwater permitting requirements as a steam electric power generating facility. 40 C.F.R. § 122.26(b)(14)(vii). As a result of the substantial changes in operations, physical structures, and effluent discharges at Benning facility in recent years, however, the stormwater discharges at the facility are no longer “associated with industrial activity” within the meaning of the applicable regulations. 40 C.F.R. § 122.26(b)(14). If the Benning Service Center were constructed today as a new facility as it is currently configured and operated, it would not be subject to NPDES permitting for stormwater discharges associated with industrial activity.

It appears that a permit is nonetheless required for the facility’s stormwater discharge under 40 C.F.R. § 122.26(a)(1)(i) based on the previous permitting of this discharge.³ However, in view of the fact that the discharges at the facility now consist entirely of stormwater, Pepco proposes that EPA use the NPDES Multi-Sector General Permit (“MSGP”) for Stormwater Associated with Industrial Activities as a model for structuring the renewed NPDES permit for the Benning facility. Given the nature of the current operations at the facility, there is no basis to regulate the facility’s stormwater more strictly than the MSGP regulates stormwater associated with a wide range of industrial activities.

The MSGP controls stormwater discharges through a combination of required best management practices (“BMPs”) and benchmark monitoring. *See* EPA, NPDES Multi-Sector General Permit for Stormwater Associated with Industrial Activities (June 4, 2015). In particular, the MSGP requires quarterly benchmark monitoring to assess the efficacy of control measures at a given facility. MSGP Part 6.2.1. If monitoring results averaged over four quarters exceed a benchmark concentration, the facility must take corrective action, including revision of the facility’s Stormwater Pollution Prevent Plan (“SWPPP”). However, the exceedance of the benchmark does not itself constitute a permit violation. Although the MSGP provides that benchmark monitoring may be discontinued for the remainder of the permit term if the average monitored concentrations for the first four quarters do not exceed the benchmarks, Pepco would propose to conduct quarterly benchmark monitoring of stormwater at the Benning facility for the entire term of the permit.

² Pepco recently conducted a CCTV inspection of the underground storm drain systems at the Benning Facility. The results of this inspection raised some questions about the accuracy of the current system map with respect to Outfall 101. Pepco will be conducting a further investigation of the Outfall 101 drainage system and will provide an updated drainage map as warranted by the results of that further investigation. Pepco did not want to wait to complete this investigation before submitting the updated permit renewal application so as not to delay EPA’s review of the application with respect to Outfall 013, which accounts for the vast majority of the stormwater flow from the facility to a permitted discharge point.

³ For this reason, Pepco answered “No” to question 1.2.5 in updating Form 1, but nonetheless also updated Form 2F.

Pepco already employs a number of BMPs and other measures to manage and treat stormwater discharges at the Benning facility. These measures would be continued under and incorporated into the renewed permit. Pepco first employed these BMPs pursuant to a Total Maximum Daily Load (“TMDL”) Implementation Plan required under the current NPDES permit. NPDES Permit No. DC0000094, at 28. This plan was to be implemented in three phases: stormwater inlet maintenance, metals management, and future recommendations for additional BMPs and low impact development structures. AMEC Foster Wheeler, *Benning Service Center Phase 3 TMDL Implementation Plan for Compliance with the NPDES Permit* (Dec. 2014) (“Phase 3 Compliance Plan”). Pepco completed implementation of the first two phases of control measures to reduce metal concentrations in stormwater as of December 2012, and then identified supplemental actions to further reduce metal levels in stormwater discharges in the Phase 3 Compliance Plan submitted to EPA in late 2014. These supplemental actions included identifying and addressing potentially significant contributors to metals in stormwater; evaluating and enhancing existing stormwater inlet controls; investigating potential groundwater infiltration to the storm drain system; conducting targeting storm drain inlet sampling to identify areas with the greatest metals loading and opportunities for additional controls; and updating the facility’s SWPPP. Requirements to implement and maintain additional stormwater system BMPs and to install and operate a stormwater treatment system at the Benning facility were mandated under a Consent Decree entered into by Pepco and the United States, on behalf of EPA, on May 19, 2017. Consent Decree, *United States v. Pepco*, No. 1:15-cv-01845-JEB, Doc. 18 (D.D.C. May 19, 2017). In accordance with the Consent Decree, Pepco has continued to implement these various BMPs and has installed a stormwater treatment system for stormwater flows at certain “hot spots” at the facility (i.e., areas identified as contributing relatively higher contaminant loads to stormwater).

The facility’s current NPDES permit contains numerical limits for stormwater discharges from Outfall 013 to the Anacostia River for cadmium, copper, iron, lead, nickel, zinc, and total suspended solids. Quarterly monitoring under the current permit shows that the BMPs and other control measures implemented since 2014 have resulted in significant decreases in pollutant concentrations and have been effective to meet the Daily Maximum Limits under the permit for metals in stormwater discharged via Outfall 013. Under Pepco’s proposed approach, rather than set Daily Maximum Limits as in its current permit, the renewed permit would define benchmarks that would trigger additional stormwater controls if the four-quarter rolling average of monitoring samples exceeds the applicable benchmarks, following the same approach as under the MSGP.

To ensure that this approach would be properly protective of the environment, Pepco proposes that EPA set the benchmarks for metals at concentrations equal to the effluent limits that would apply if the permit were to be renewed on the same basis as it was last issued. As documented in the technical memorandum prepared by Environmental Consulting & Technology, Inc., submitted herewith along with the updated permit application forms, Pepco has calculated water-quality-based Daily Maximum Limits for stormwater discharges at Outfalls 013 and 101 based on recent monitoring data and the current TMDLs. These figures are presented in the following table.

Parameter	Outfall 013	Outfall 101
Copper	16.67 ug/L	16.37 ug/L
Iron	1.0 mg/L	1.0 mg/L
Zinc	110.56 ug/L	110.56 ug/L
Lead	None required	61.77 ug/L


The foregoing approach for renewing the Benning facility's individual NPDES permit comports with the anti-backsliding provisions of EPA's NPDES permitting regulations because "the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under § 122.62." 40 C.F.R. § 122.44(l)(1). Here, the shutdown and removal of the generating station and resulting elimination of process water discharges satisfies the requirements of the regulation as either "material and substantial alterations," 40 C.F.R. § 122.62(a)(1), or "new information" that would justify "the application of different permit conditions" than in the existing permit. 40 C.F.R. § 122.62(a)(2).

In sum, substantial changes at the Benning facility since the issuance of the current permit warrant a different approach for stormwater permitting. Using the MSGP as a model, the facility's next permit should rely on benchmark monitoring rather than numerical effluent limits to ensure the effectiveness of the facility's stormwater control measures. For the reasons explained above, this approach properly takes into consideration the substantial changes at the facility while being no less protective of the environment than the facility's current permit.

If EPA nonetheless decides to renew the permit using numerical limits for metals in stormwater, rather than benchmarks, such limits should be defined solely as Daily Maximum Limits. Given the intermittent nature of the discharge and consistent with the approach EPA has taken for other individual NPDES permits authorizing stormwater discharges to the Anacostia River, there should be no Monthly Average Limits in addition to the Daily Maximum Limits.

Please contact me at (202) 872-7915 or tammy.sanford@exeloncorp.com if you have any questions or need additional information regarding this submittal.

Sincerely,



Tammy D. Sanford

cc: Ms. Valerie Lopez Carrasquillo

Enclosures

Exhibit A

Benning Site Aerial Photos



Google Earth Pro

Year: 2012



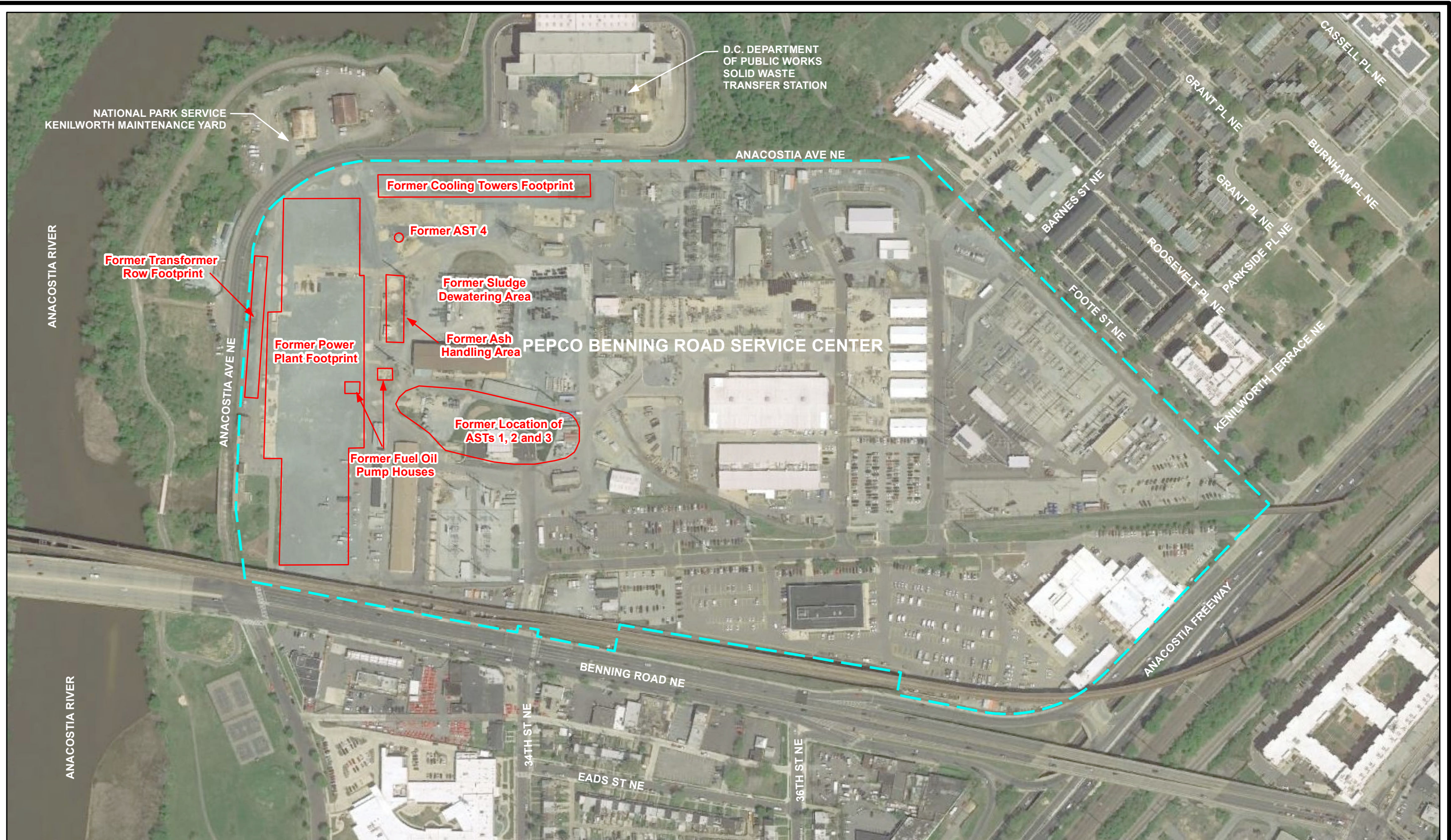


0 125 250 500
SCALE IN FEET

Aerial Reference: Google Earth (2018)

Pepco Benning Road Facility

3400 Benning Rd., NE
Washington, DC 20019



NATIONAL PARK SERVICE
KENILWORTH MAINTENANCE YARD

D.C. DEPARTMENT
OF PUBLIC WORKS
SOLID WASTE
TRANSFER STATION

ANACOSTIA AVE NE

Former Cooling Towers Footprint

Former AST 4

Former Sludge
Dewatering Area

Former Ash
Handling Area

Former Location of
ASTs 1, 2 and 3

Former Fuel Oil
Pump Houses

Former Power
Plant Footprint

Former Transformer
Row Footprint

PEPCO BENNING ROAD SERVICE CENTER

ANACOSTIA AVE NE

BARNES ST NE

ROOSEVELT PL NE

GRANT PL NE

GRANT PL NE

PARKSIDE PL NE

BURNHAM PL NE

KENILWORTH TERRACE NE

FOOTE ST NE

BENNING ROAD NE

34TH ST NE

EADS ST NE

36TH ST NE

ANACOSTIA FREEWAY

0 125 250 500
SCALE IN FEET

Aerial Reference: Google Earth (2018)

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